

Full Size or Largest Size
(site plan, landscape, elevations)

118th Street & Ranch Gate Road Traffic Impact and Mitigation Analysis



Prepared for:

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EXPIRES 6-30-19

Project Number: 17.1055
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Table of Contents:

1. Introduction and Summary	1
1.1. Purpose of Report and Study Objectives	1
1.2. Executive Summary	1
2. Proposed Development	4
3. Study Area.....	6
3.1. Study Roadway Segments	6
3.2. Study Intersections.....	6
3.3. Surrounding Area Land Use.....	8
3.4. Pedestrian Facilities	8
3.5. Bicycle Facilities.....	8
3.6. Collision History.....	8
4. Existing Conditions.....	9
4.1. Existing Land Use.....	9
4.2. Existing Traffic Counts	9
4.3. Existing Capacity Analysis.....	11
5. Projected Traffic	13
5.1. Trip Generation	13
5.2. Trip Generation Comparison	15
5.3. Trip Distribution and Assignment.....	15
6. Future Conditions (Year 2020)	18
6.1. Year 2020 Background Traffic Volumes	18
6.2. Year 2020 Total Traffic Volumes	18
6.3. Year 2020 Capacity Analysis.....	18
6.3.1. Year 2020 No Build Capacity Analysis	18
6.3.2. Year 2020 Build Capacity Analysis	19
7. Recommendations & Conclusions	24



Figures:

Figure 1 – Vicinity Map	3
Figure 2 – Site Plan	5
Figure 3 – Study Area.....	7
Figure 4 – Existing Traffic Volumes.....	10
Figure 5 – Existing Capacity Analysis	12
Figure 6 – Trip Distribution	16
Figure 7 – Site Traffic Volumes	17
Figure 8 – Year 2020 Background Traffic Volumes	20
Figure 9 – Year 2020 Build Traffic Volumes	21
Figure 10 – Year 2020 No Build Capacity Analysis	22
Figure 11 – Year 2020 Build Capacity Analysis.....	23

Tables:

Table 1 – LOS Criteria for Unsignalized Intersections.....	11
Table 2 – Existing Level of Service and Delay for Unsignalized Intersections.....	11
Table 3 – Existing Parcels.....	13
Table 4 – Existing Zoning Trip Generation	14
Table 5 – Trip Generation – Proposed Development	14
Table 6 – Trip Generation Comparison (Existing vs. Proposed).....	15
Table 7 – Year 2020 Level of Service and Delay for Unsignalized Intersections.....	19

Appendices:

Appendix A – Proposed Site Plan	A
Appendix B – Collision Data.....	B
Appendix C – Parcel Information.....	C
Appendix D – Traffic Counts.....	D
Appendix E – Existing Capacity Analysis	E
Appendix F – Trip Generation	F
Appendix G – Maricopa Association of Governments Population Projection.....	G
Appendix H – Year 2020 No Build Capacity Analysis	H
Appendix I – Year 2020 Build Capacity Analysis	I

1. Introduction and Summary

1.1. Purpose of Report and Study Objectives

J2 Engineering and Environmental Design was retained by Sonoran Peaks LLC to complete a Traffic Impact and Mitigation Analysis for the proposed residential development, located on the northeast corner of 118th Street and Ranch Gate Road, in Scottsdale, Arizona. The proposed development is bound by undeveloped land to the north and east, Ranch Gate Road to the south, and 118th Street to the west. See **Figure 1** for a vicinity map.

The proposed residential development is anticipated to contain 42 single-family homes. There is one (1) proposed full access driveway on 118th Street located approximately 600 feet north of Ranch Gate Road.

The objective of this Traffic Impact and Mitigation Analysis is to analyze the traffic related impacts of the proposed development to the adjacent roadway network.

1.2. Executive Summary

This report presents the analyses and the results of a traffic study prepared for the proposed residential development that will be located on the northeast corner of 118th Street and Ranch Gate Road. It will be comprised of 42 single-family homes.

This Traffic Impact and Mitigation Analysis includes:

- Level of service analysis of existing conditions for the weekday AM and PM peak hours
- Trip Generation for the proposed development
- Trip Generation comparison to the existing zoning
- Level of service analysis for the opening year (2020) weekday AM and PM peak hours
 - 2020 No Build
 - 2020 Build

The following study intersections were evaluated:

- 118th Street and Ranch Gate Road (1)
- 118th Street and Driveway A (2) – proposed new driveway

Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analysis was completed for existing study intersection. The intersection of 118th Street and Ranch Gate Road operates at LOS A for all movements during both the AM and PM peak hours.

Trip Generation

The proposed development located on the northeast corner of 118th Street and Ranch Gate Road is anticipated to generate, 469 weekday trips, with 35 trips occurring during the AM peak hour and 45 trips occurring during the PM peak hour.

Trip Generation Comparison

A comparison between the trips generated by the build out under the existing zoning with 21 single-family homes versus the proposed 42 single-family homes was calculated.

Trip Generation Comparison (Existing Zoning vs. Proposed)

Land Use	ITE Code	Qty	Units	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	21	Dwelling Units	248	20	5	15	23	14	9
Total				248	20	5	15	23	14	9
Single-Family Detached Housing	210	42	Dwelling Units	469	35	9	26	45	28	17
Total				469	35	9	26	45	28	17
Diference				221	15	4	11	22	14	8

The proposed residential development is anticipated to generate 221 more weekday daily trips, 15 more trips during the AM peak hour, and 22 more trips during the PM peak hour.

Future Conditions

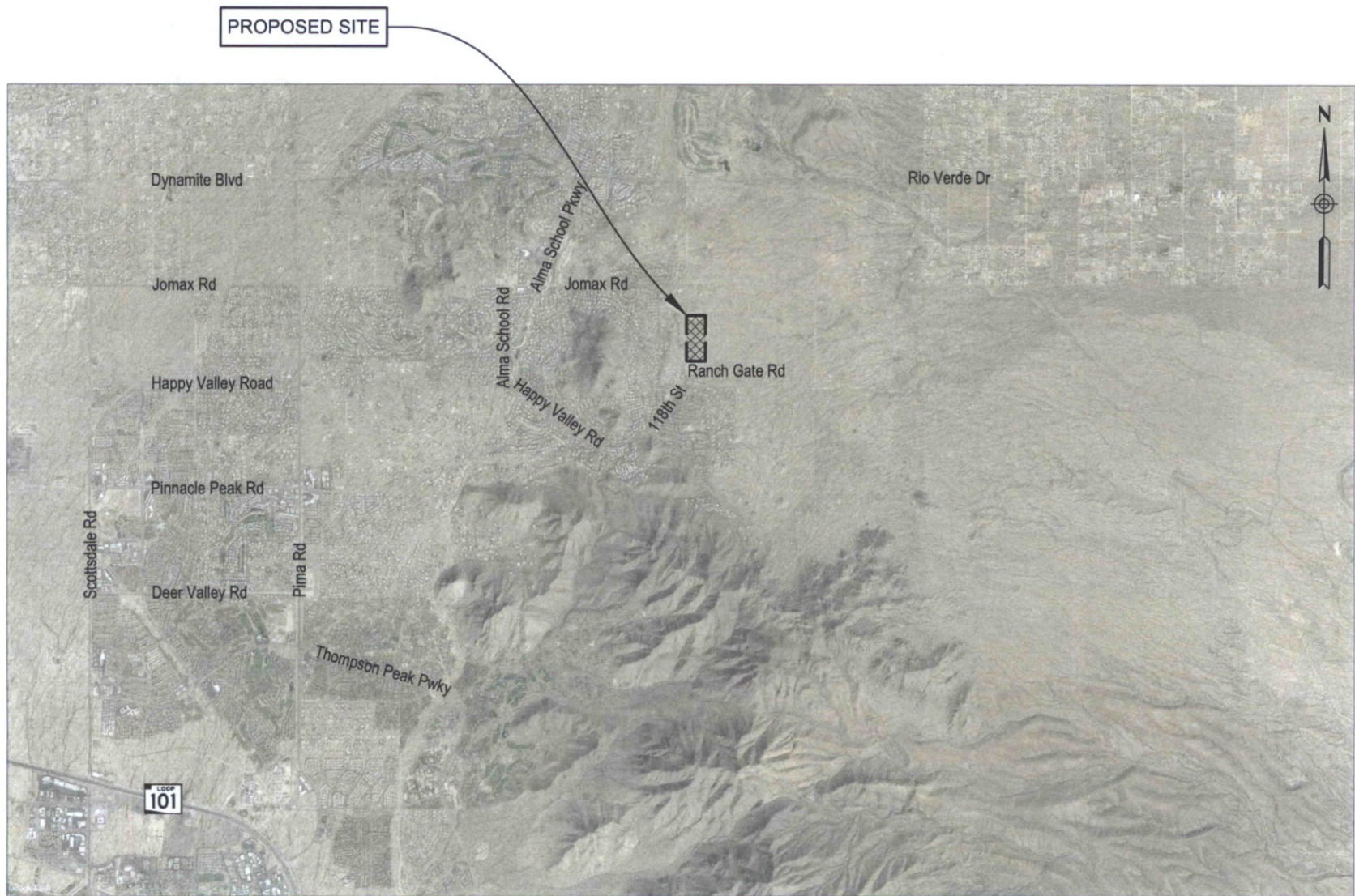
Year 2020 (opening year) analyses were completed without the build out, as well as with the build out of the proposed development. An annual growth rate of 2.1% was applied to the existing traffic volumes to create the future background traffic volumes for year 2020.

Year 2020

Capacity analyses were completed for both the AM and PM peak hours for year 2020, without the build out of the proposed residential development, as well as with the build out. All movements operate at a LOS A.

Conclusion

With the build out of the proposed residential development it is anticipated to result in minimal impacts to the traffic operations along the surrounding roadway network.



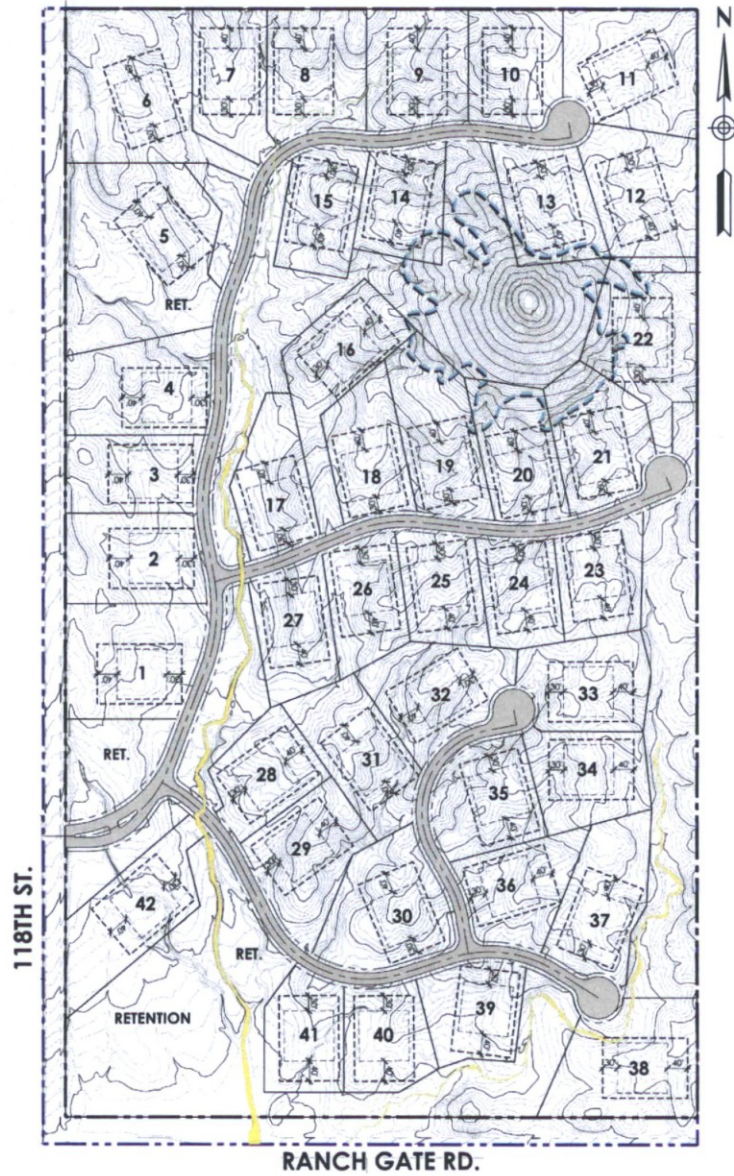
2. Proposed Development

The proposed 118th Street and Ranch Gate Road residential development will be located on the northeast corner of 118th Street and Ranch Gate Road, in the City of Scottsdale, Arizona.

The existing site is currently undeveloped land, made up of 5 (five) parcels zoned for R1-130. The proposed zoning is R1-43 ESL.

The proposed development will include 42 single-family dwelling units. See **Figure 2** for the site plan. See **Appendix A** for the proposed site plan.

The entrance and exit to and from the proposed site will be located along 118th Street, approximately 600 feet north of Ranch Gate Road.



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Site Plan

Figure 2

3. Study Area

The study area is located in the City of Scottsdale, Arizona. **Sections 3.1** and **3.2** provide detailed descriptions of the roadway segments and intersections. See **Figure 3**.

3.1. Study Roadway Segments

118th Street is a north-south roadway adjacent to the proposed development that provides one (1) lane for each direction of travel. The City of Scottsdale classifies 118th Street as a rural minor collector according to the *City of Scottsdale Master Transportation Plan*, adopted on July 5, 2016. There is a posted speed limit of 35 mph.

Ranch Gate Road is an east-west roadway that begins at 118th Street and continues to the east and provides one (1) lane for each direction of travel. The City of Scottsdale classifies Ranch Gate Road as a rural minor collector according to the *City of Scottsdale Master Transportation Plan*, adopted on July 5, 2016. There is an unposted speed limit of 25 mph.

Jomax Road is an east-west roadway. West of 118th Street, Jomax Road provides two (2) lanes of travel in the westbound direction, and one (1) lane of travel in the eastbound direction, with a raised landscaped median. East of 118th Street, Jomax Road provides one (1) through lane for each direction of travel. Jomax Road terminates approximately 1,000 feet east of 118th Street. The City of Scottsdale classifies Jomax Road as a rural minor collector according to the *City of Scottsdale Master Transportation Plan*, adopted on July 5, 2016. There is a posted speed limit of 40 mph west of 116th Street, and a posted speed limit of 30 mph east of 116th Street.

Happy Valley Road is generally an east-west roadway and provides one (1) lane for each direction of travel within the vicinity of the study area. The City of Scottsdale classifies Happy Valley Road as a rural minor arterial according to the *City of Scottsdale Master Transportation Plan*, adopted on July 5, 2016. There is a posted speed limit of 40 mph.

3.2. Study Intersections

118th Street and Ranch Gate Road (1) currently operates as a two-way stop controlled intersection, with stop control on the westbound and eastbound approaches. All four approaches provide one (1) shared left-through-right turn lane.

118th Street and Driveway A (2) located approximately 600 feet north of Ranch Gate Road, is proposed to be a T-intersection. The northbound approach will provide one (1) shared through-right turn lane. The southbound approach will provide one (1) shared left-through turn lane. The westbound approach will provide one (1) shared left-right turn lane.



3.3. Surrounding Area Land Use

The proposed development is bordered by residential communities to the south and west. Undeveloped land borders the proposed development to the north and east.

3.4. Pedestrian Facilities

Currently, sidewalks are not provided along either side of 118th Street or Ranch Gate Road.

3.5. Bicycle Facilities

Bike lanes are currently provided along the east side 118th Street from Buckskin Trail to Jomax Road.

3.6. Collision History

The most recent 3-year collision history, from June 2015 to June 2018, was obtained from the City of Scottsdale. See **Appendix B** for the detailed collision data. The collision data included the following roadway segment:

- 118th Street/Happy Valley Road, from Jomax Road to Alma School Road

During the three year period, there were a total of six (6) crashes along 118th Street/Happy Valley Road, between Jomax Road and Alma School Road. Three (3) crashes were reported at the intersection of Happy Valley Road and Alma School Road. Two (2) crashes were reported at the intersection of Happy Valley Road and 104th Way. One (1) crash was reported at the intersection of Happy Valley Road and Windy Walk Drive.

Of the six (6) crashes that occurred along 118th Street/Happy Valley Road, between Jomax Road and Alma School Road, two (2) resulted in non incapacitating injuries, one (1) possible injury, with the remaining being property damage only. There were a total of two (2) rear ends, two (2) left turn, and two (2) angle crashes.

There were no documented collisions at the study intersection of 118th Street/Happy Valley Road and Ranch Gate Road (1).

4. Existing Conditions

4.1. Existing Land Use

The existing site is currently undeveloped land, made up of 5 (five) parcels zoned for R1-130. See **Appendix C** for detailed parcel information.

4.2. Existing Traffic Counts

A local data collection firm, Field Data Services of Arizona, Inc., was utilized to collect traffic counts. On Tuesday, June 12, 2018, turning movement counts were obtained from 7:00 to 9:00 am and from 4:00 to 6:00 pm at the following intersection:

- 118th Street and Ranch Gate Road

Additionally, on Tuesday, June 12, 2018, bi-directional tube counts for 24-hours in 15 minute intervals were collected along the following three (3) roadway segments:

- Ranch Gate Road east of 118th Street
- 118th Street north of Ranch Gate Road
- Jomax Road between Alma School Road and 118th Street

The turning movement counts were analyzed for the highest 1-hour within each time period. These are the peak hours that were analyzed throughout this study.

- AM Peak Hour 7:45 am – 8:45 am
- PM Peak Hour 4:00 pm – 5:00 pm

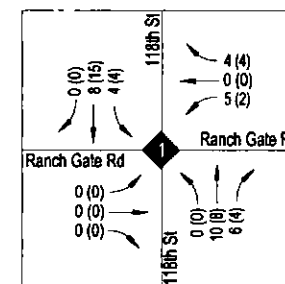
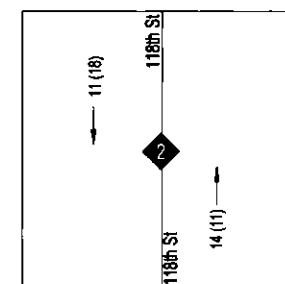
See **Appendix D** for detailed count data.


Per the direction of the City of Scottsdale Transportation, a 20% seasonal adjustment factor was used to adjust the existing traffic counts. See **Figure 4** for the existing adjusted AM and PM peak hour weekday traffic volumes.



Legend

- AM(PM) Peak Hour Traffic Volumes
- Intersection
- <ADT> Average Daily Traffic Volumes



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Existing
Traffic Volumes

Figure 4

4.3. Existing Capacity Analysis

The existing conditions capacity analyses was completed for the study intersection. The capacity and level of service was evaluated using the methodology presented in the *2010 Highway Capacity Manual*. Traffic analysis software, Synchro Version 9.2, was used to perform the analyses using the existing Peak Hour Factor (PHF) calculated from the traffic counts.

Table 1 is from the *2010 Highway Capacity Manual* Exhibit 19-1, which lists the Level of Service (LOS) thresholds for two-way stop-controlled intersections.

Table 1 – LOS Criteria for Unsignalized Intersections

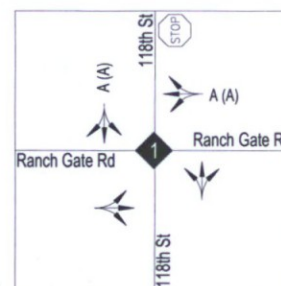
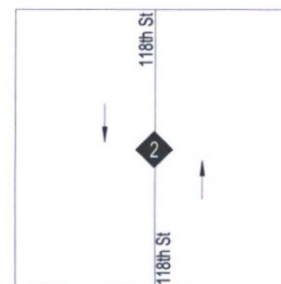
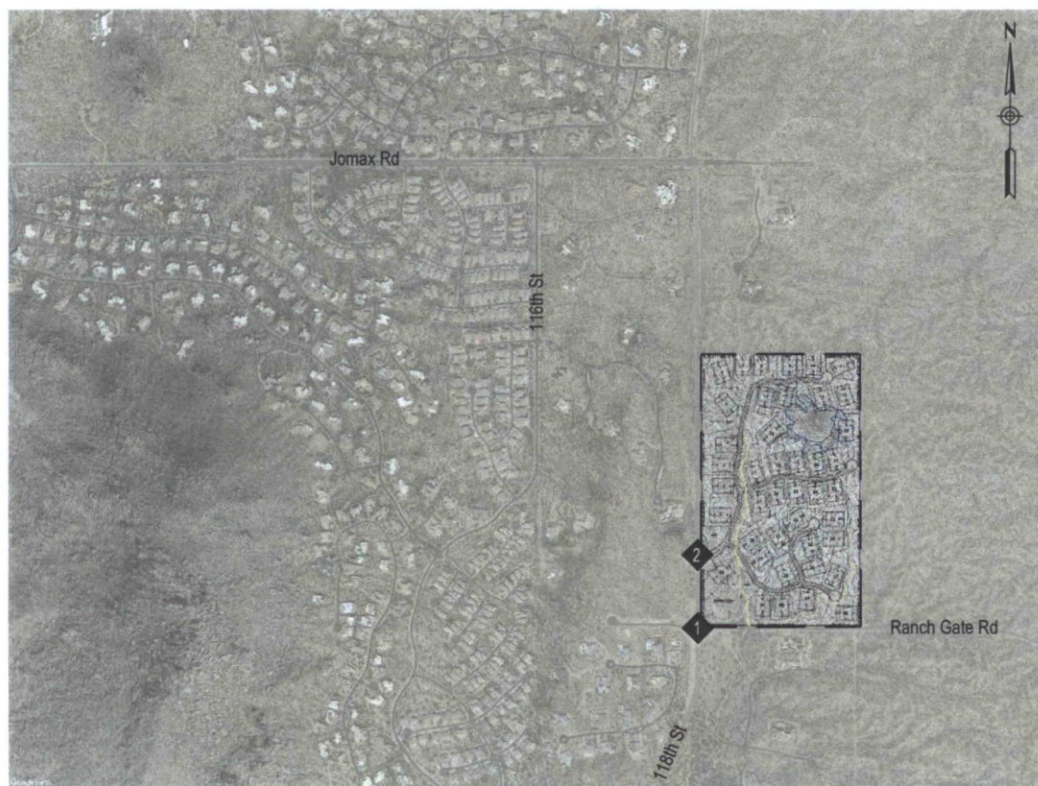
LOS	Control Delay (s/veh)
A	0 - 10
B	> 10–15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50

The existing AM and PM peak hour level of service and delay for the unsignalized intersection is shown in **Table 2**.

See **Figure 5** for the existing AM and PM peak hour capacity analysis. The detailed capacity analysis sheets can be found in **Appendix E**.

Table 2 – Existing Level of Service and Delay for Unsignalized Intersections

Intersection	Existing Conditions			
	AM PEAK		PM PEAK	
Unsignalized Intersections	LOS	DELAY	LOS	DELAY
118th Street and Ranch Gate Road (1)				
Westbound Shared Left-Through-Right	A	8.6	A	8.5
Southbound Shared Left-Through-Right	A	7.3	A	7.3



Legend

- AM(PM) Existing Peak Hour Capacity Analysis
- Intersection
- Lane Configuration

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Existing
Capacity Analysis

Figure 5

5. Projected Traffic

5.1. Trip Generation

The trip generations for the existing and proposed zoning was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 10th Edition*. The ITE rates and fitted curve equations are based on studies that measured the trip generation characteristics for various types of land uses. The rates and equations are expressed in terms of trips per unit of land use type. This publication is considered to be the standard for the transportation engineering profession.

Additionally, according to the *Trip Generation Handbook, 3rd Edition*, the fitted curve equation is to be used when:

- A fitted curve equation is provided and the data plot has at least 20 data points
- OR
- A fitted curve equation is provided the curve has and R^2 of at least 0.75, the fitted curve falls within data cluster, and the weighted standard deviation is more than 55 percent of the weighted average rate.

Therefore, this analysis was completed using the fitted curve equation.

TRIP GENERATION (EXISTING ZONING)

The land uses for the five (5) existing parcels were determined from the parcel information attained from the Maricopa County Assessor's website (www.mcassessor.maricopa.gov). See **Appendix C and Table 3**.

Table 3 – Existing Parcels

No.	Parcel	Single-Family Residential	Lot Size (sq ft)
1	217-02-018A	R1-130 Zoning	869,022
2	217-02-018B	R1-130 Zoning	869,022
3	217-02-018C	R1-130 Zoning	440,628
4	217-02-018D	R1-130 Zoning	404,001
5	217-02-018E	R1-130 Zoning	409,097
TOTAL			2,991,770
TOTAL (in acres)			68.7
Max. Dwelling Units (0.315 du/acre)			21

R-130 Zoning – Single-Family Residential

The maximum density for R-130 zoning is 0.315 dwelling units per acre, according to the City of Scottsdale Code of Ordinances Appendix B, Article VI, Section 6.208. The five (5) R-130 parcels are approximately 68.7 acres, resulting in a possible build out of 21 dwelling units.

The trip generation for the existing zoning was calculated utilizing the ITE Land Use 210 Single-Family Detached Housing. See **Table 4**.

Table 4 – Existing Zoning Trip Generation

Land Use	ITE Code	Qty	Units	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	21	Dwelling Units	248	20	5	15	23	14	9
TOTAL				248	20	5	15	23	14	9

TRIP GENERATION (PROPOSED DEVELOPMENT)

The proposed development is anticipated to contain 42 dwelling units. It is anticipated the 42 dwelling units will operate similar to single-family detached houses and therefore, ITE Land Use 210 Single-Family Detached Housing was utilized to estimate the trips generated by the 42 single-family home residential development. See **Table 5** below. For detail trip generation calculations see **Appendix F**.

Table 5 – Trip Generation – Proposed Development

Land Use	ITE Code	Qty	Units	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	42	Dwelling Units	469	35	9	26	45	28	17
TOTAL				469	35	9	26	45	28	17

5.2. Trip Generation Comparison

A comparison between the trips generated under the build out of the existing zoning versus the proposed 42 dwelling unit single-family residential development is shown in **Table 6**.

Table 6 – Trip Generation Comparison (Existing vs. Proposed)

Land Use	ITE Code	Qty	Units	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	21	Dwelling Units	248	20	5	15	23	14	9
Total				248	20	5	15	23	14	9
Single-Family Detached Housing	210	42	Dwelling Units	469	35	9	26	45	28	17
Total				469	35	9	26	45	28	17
Diference				221	15	4	11	22	14	8

Table 6 shows that the proposed 118th Street and Ranch Gate Road development is anticipated to generate 221 more weekday daily trips, 15 more trips during the AM peak hour, and 22 more trips during the PM peak hour than the build out under the existing zoning.

5.3. Trip Distribution and Assignment

The trip distribution procedure determines the general pattern of travel for vehicles entering and leaving the proposed development. The trip distribution of the proposed 118th Street and Ranch Gate Road residential development is based on the existing traffic patterns, surrounding roadway network, and general knowledge of the major destinations in the area.

For the daily traffic volumes, it was assumed that 100% of the weekday trips would utilize 118th Street, with 48% to and from the north and utilizing Jomax Road, while the remaining 52% utilizing 118th Street/Happy Valley Road to the south. These percentages were based off of the tube count data. The trip distribution is shown in **Figure 6** and the site generated traffic volumes are shown in **Figure 7**.



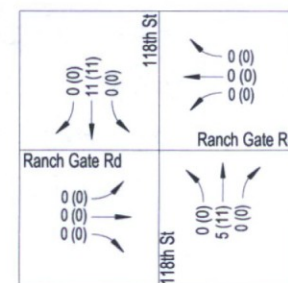
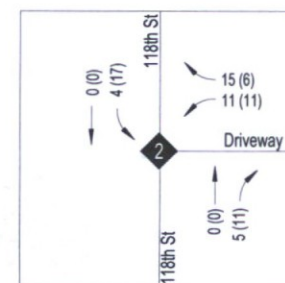
Legend

AM(PM)	Inbound Trip Distribution Percentages
AM(PM)	Outbound Trip Distribution Percentages

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Trip Distribution

Figure 6



Legend

- AM(PM) 2020 Site Traffic Volumes
- Intersection
- <ADT> Average Daily Traffic Volumes

6. Future Conditions (Year 2020)

The proposed development located on the northeast corner of 118th Street and Ranch Gate Road is anticipated to be constructed and ready to open in the year 2020. This study analyzes the effects the proposed development will have in the surrounding roadway network during the opening year of 2020.

According to the 2016 Maricopa Associations of Governments (MAG) Socioeconomic projections, it is estimated that in the year 2050 the population within the study area will be approximately 111,246. MAG estimates that the 2015 population of the surrounding area to be 54,773. This results in an approximate annual growth rate of 2.05%. As a conservative approach, a 2.1% annual growth rate was utilized. See **Appendix G** for the MAG Socioeconomic projections.

6.1. Year 2020 Background Traffic Volumes

The 2.1% annual growth rate was applied to the existing traffic volumes through the year 2020. This represents the traffic volumes without the build out of the proposed development. The 2020 background traffic volumes are shown in **Figure 8**.

6.2. Year 2020 Total Traffic Volumes

When the site traffic (**Figure 7 – Site Traffic Volumes**) is added to the 2020 background traffic volumes (**Figure 8**), the result is the 2020 build traffic volumes. This represents the traffic volumes with the build out of the proposed development located on the northeast corner of 118th Street and Ranch Gate Road. The year 2020 build traffic volumes are shown in **Figure 9**.

6.3. Year 2020 Capacity Analysis

6.3.1. Year 2020 No Build Capacity Analysis

The capacity and level of service for the study area intersection was evaluated for the year 2020 no build traffic volumes shown in **Figure 8**. The peak hour factor was assumed to be 0.92.

The year 2020 AM and PM peak hour level of service and delay for the unsignalized intersection is shown in **Table 7 – Year 2020 Level of Service and Delay for Unsignalized Intersections**.

See **Figure 10** for the AM and PM peak hour year 2020 no build capacity analysis. The detailed capacity analysis sheets can be found in **Appendix H**.

6.3.2. Year 2020 Build Capacity Analysis

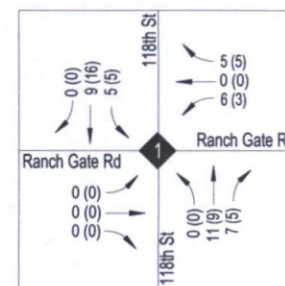
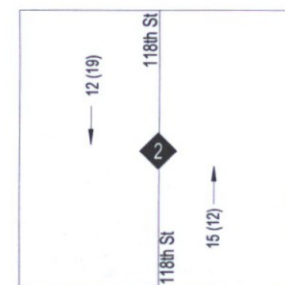
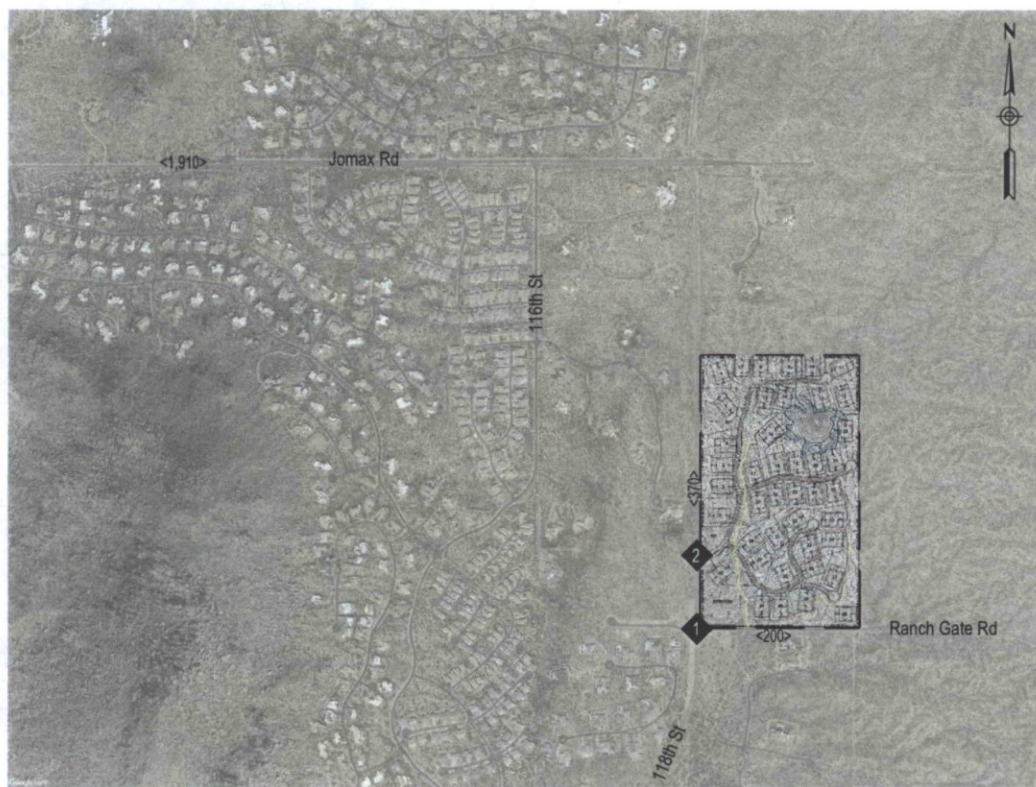
The capacity and level of service for the study area intersection was evaluated for the year 2020 build traffic volumes shown in **Figure 9**.

The year 2020 AM and PM peak hour level of service and delay for the unsignalized intersection is shown in **Table 7**.

See **Figure 11** for the AM and PM peak hour year 2020 build capacity analysis. The detailed capacity analysis sheets can be found in **Appendix I**.

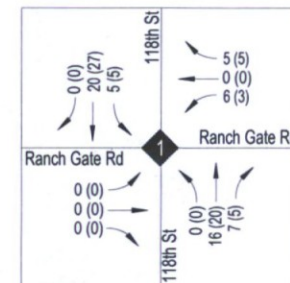
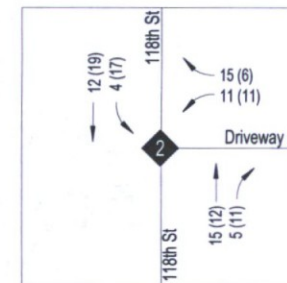
Table 7 – Year 2020 Level of Service and Delay for Unsignalized Intersections

Intersection	2020 No Build				2020 Build			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
Unsignalized Intersections	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
118th Street and Ranch Gate Road (1)								
Westbound Shared Left-Through-Right	A	8.6	A	8.5	A	8.7	A	8.6
Southbound Shared Left-Through-Right	A	7.3	A	7.3	A	7.3	A	7.3
118TH Street and Driveway A (2)								
Westbound Shared Left-Right	-	-	-	-	A	8.6	A	8.8
Southbound Shared Left-Through	-	-	-	-	A	7.3	A	7.3



Legend

- AM(PM) 2020 No Build Peak Hour Traffic Volumes
- Intersection
- <ADT> Average Daily Traffic Volumes



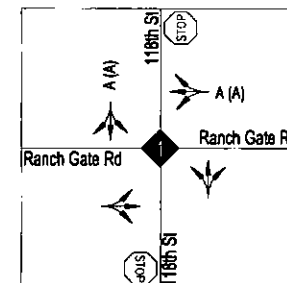
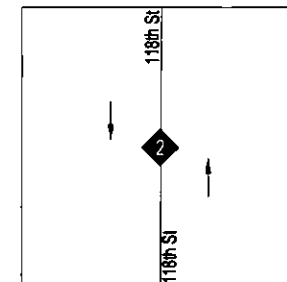
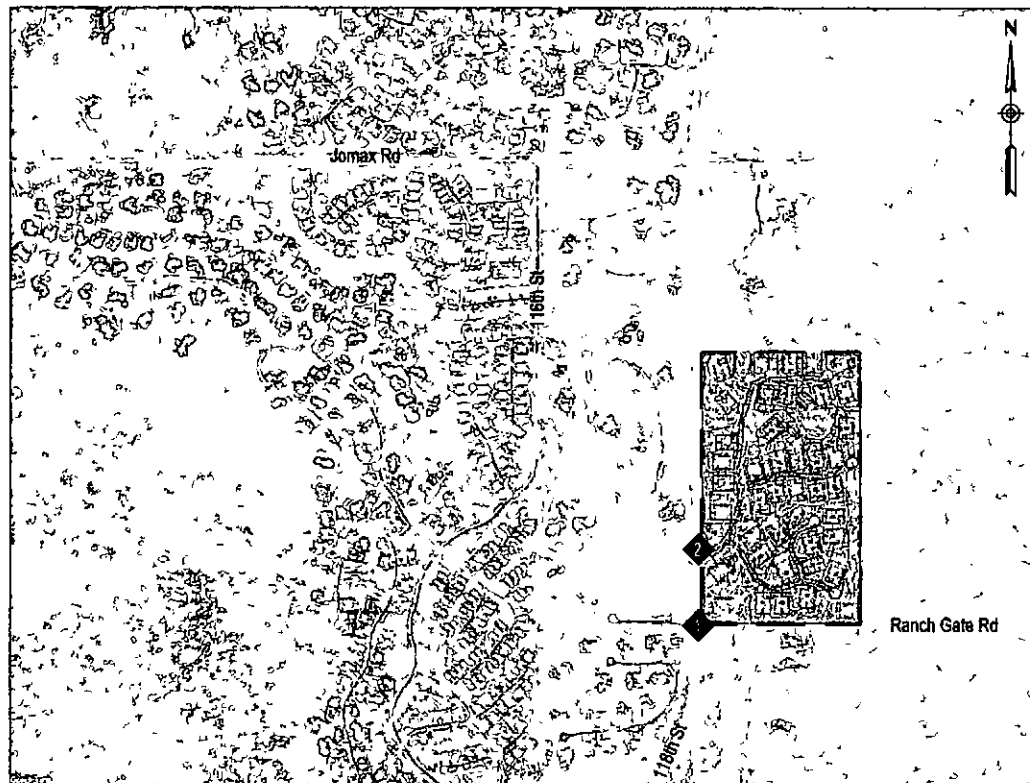
Legend

AM(PM)	2020 Build Peak Hour Traffic Volumes
	Intersection
<ADT>	Average Daily Traffic Volumes

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2020 Build
Traffic Volumes

Figure 9



Legend

AM(PM) 2020 No Build Peak Hour Capacity Analysis



Intersection



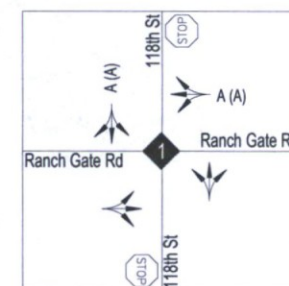
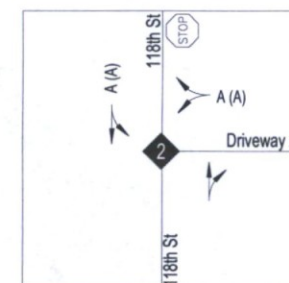
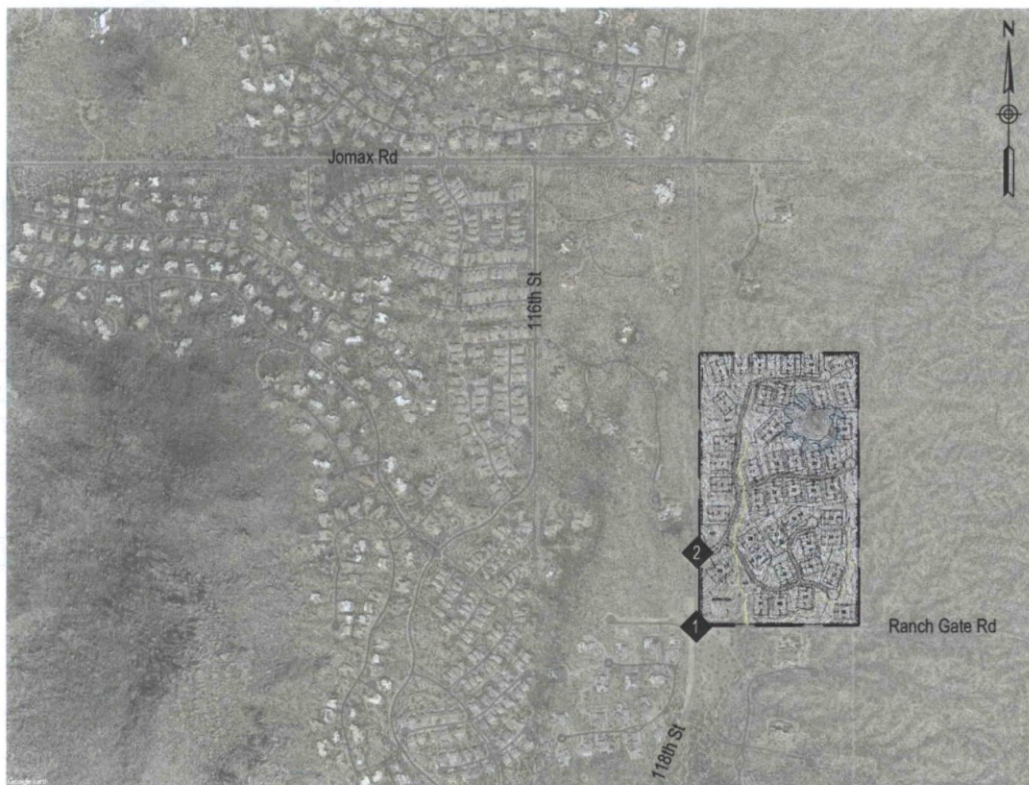
Lane Configuration

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2020 No Build
Capacity Analysis

Figure 10



Legend

AM(PM) 2020 Build Peak Hour Capacity Analysis



Intersection



Lane Configuration

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2020 Build
Capacity Analysis

Figure 11

7. Recommendations & Conclusions

The proposed residential development will be located on the northeast corner of 118th Street and Ranch Gate Road. It will be comprised of 42 single-family homes. There is one (1) proposed full access driveway along 118th Street approximately 600 feet north of Ranch Gate Road.

Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analysis was completed for the existing study intersection. The intersection of 118th Street and Ranch Gate Road currently operates at LOS A for all movements during both the AM and PM peak hours.

Trip Generation

The proposed development located on the northeast corner of 118th Street and Ranch Gate Road is anticipated to generate, 469 weekday trips, with 35 trips occurring during the AM peak hour and 45 trips occurring during the PM peak hour.

Trip Generation Comparison

A comparison between the trips generated by the build out under the existing zoning with 21 single-family homes versus the proposed 42 single-family homes was calculated.

Trip Generation Comparison (Existing Zoning vs. Proposed)

Land Use	ITE Code	Qty	Units	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	21	Dwelling Units	248	20	5	15	23	14	9
Total				248	20	5	15	23	14	9
Single-Family Detached Housing	210	42	Dwelling Units	469	35	9	26	45	28	17
Total				469	35	9	26	45	28	17
Difference				221	15	4	11	22	14	8

The proposed residential development is anticipated to generate 221 more weekday daily trips, 15 more trips during the AM peak hour, and 22 more trips during the PM peak hour.

Future Conditions

Year 2020 (opening year) analyses were completed without the build out, as well as with the build out of the proposed development. An annual growth rate of 2.1% was applied to the existing traffic volumes to create the future background traffic volumes for year 2020.

Year 2020

Capacity analyses were completed for both the AM and PM peak hours for year 2020, without the build out of the proposed residential development, as well as with the build out. All movements operate at a LOS A.

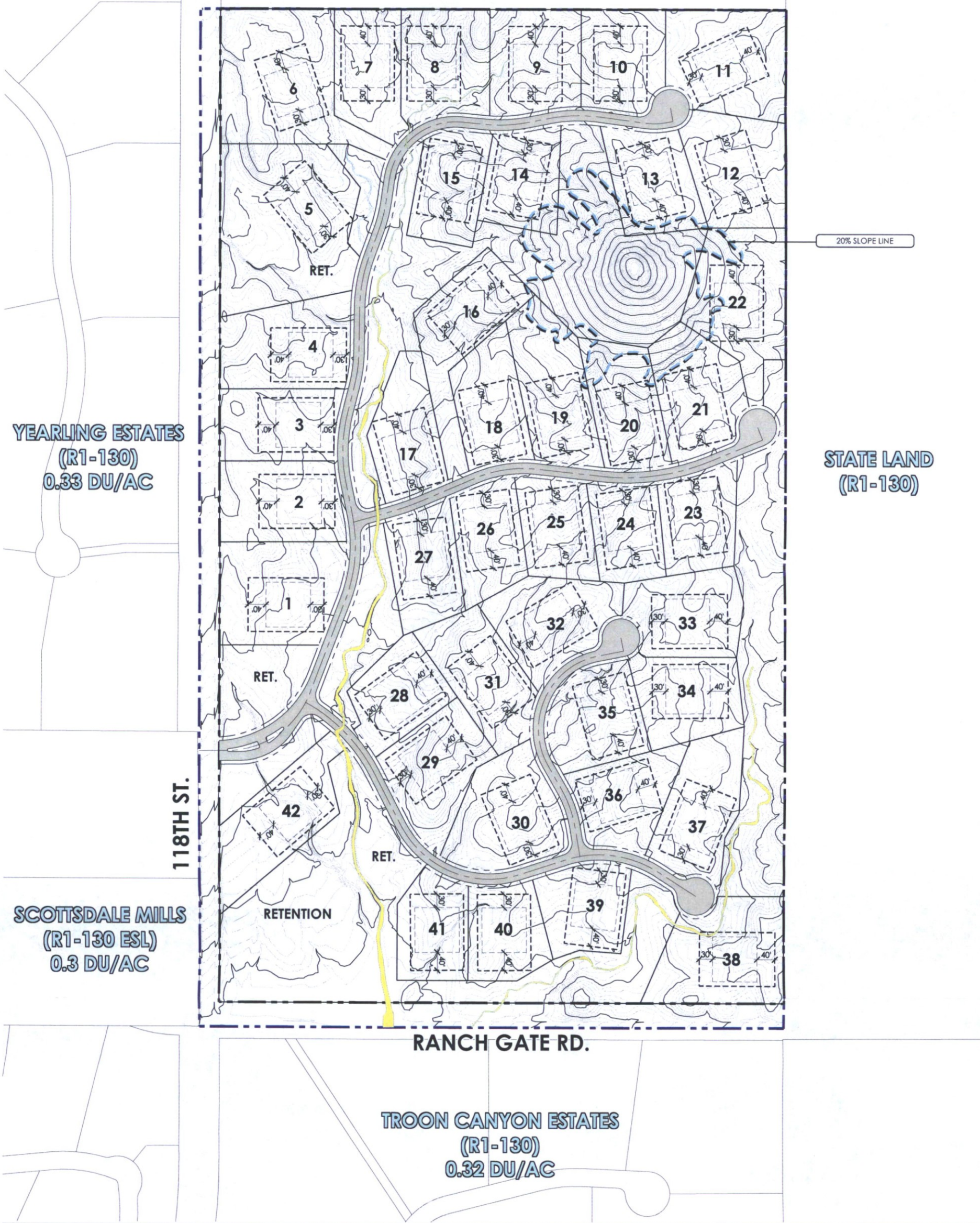
Conclusion

With the build out of the proposed residential development it is anticipated to result in minimal impacts to the traffic operations along the surrounding roadway network.

Appendix A – Proposed Site Plan

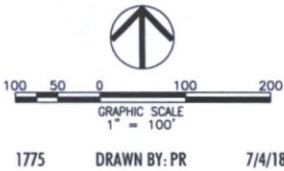
SITE DATA	
SITE AREA	68.6 AC (+/-)
EXISTING ZONING	R1-130 ESL
PROPOSED ZONING	R1-43 ESL
LOTS	42 (MIN. 32,690 SF) (AVG. 47,297 SF)
DENSITY	0.61 DU/AC
BUIDLING HEIGHT	24' FROM NATURAL GRADE

(R1-130)



land planning
development entitlements
landscape architecture
120 south ash avenue
tempe, arizona 85281
480.994.0994

118TH & RANCH GATE CONCEPTUAL SITE PLAN



Appendix B – Collision Data

CITY OF SCOTTSDALE

'15 -'16 COLLISION SUMMARY

REPORT #	DATE YYMMDD	TIME HHMM	NORTH / SOUTH ST.	TYPE	EAST WEST ST.	TYPE	DIR FROM	DIST FROM	INJ. SEV. #1 #2	PHYS. COND. #1 #2	VIOLATION #1 #2	ACTION #1 #2	TRAV. DIR. #1 #2	MANNER OF COLLISION	COMMENTS
16-14284	160622	0651	ALMA SCHOOL	RD	HAPPY VALLEY	RD	AT		1 1	0 0	2 1	1 3	EB EB	4	
16-11633	160519	1702	104	WY	HAPPY VALLEY	RD	AT		1 2	0 0	20 1	5 1	SB WB	2	
15-27921	151221	1508	112	PL	HAPPY VALLEY	RD	AT		1	0	1	1	EB	2	
16-25447	161115	0600	118	ST	RIO VERDE	DR	AT		1 1	0 0	20 1	4 1	NB WB	3	

KEY

INJURY SEVERITY: 1=NO INJURY, 2=POSSIBLE INJURY, 3=NON-INCAPACITATING INJURY, 4=INCAPACITATING INJURY, 5=FATAL INJURY, 99=NOT REPORTED / UNKNOWN

PHYSICAL CONDITION: 0=NO APPARENT INFLUENCE, 1=ILLNESS, 2=PHYSICAL IMPAIRMENT, 3=FELL ASLEEP / FATIGUED 4=ALCOHOL, 5=DRUGS, 6=MEDICATIONS, A=NO TEST GIVEN, B=TEST GIVEN, C=TEST REFUSED, D=TESTING UNKNOWN, 97=OTHER, 99=UNKNOWN

VIOLATION: 1=NO IMPROPER ACTION, 2=SPEED TOO FAST FOR CONDITIONS, 3=EXCEEDED LAWFUL SPEED 4=FOLLOWED TOO CLOSELY. 5=RAN STOP SIGN, 6=DISREGARDED TRAFFIC SIGNAL7=MADE IMPROPER TURN, 8=DROVE/RODE IN OPPOSING TRAFFIC LANE, 9=KNOWINGLY OPERATED WITH FAULTY / MISSING EQUIPMENT, 10=REQUIRED MOTORCYCLE SAFETY EQUIPMENT NOT USED, 11=PASSED IN NO PASSING ZONE, 12=UNSAFE LANE CHANGE, 13=FAILED TO KEEP IN PROPER LANE, 14=DISREGARDED PAVEMENT MARKINGS, 15=OTHER UNSAFE PASSING, 16=INATTENTION/DISTRACTION, 17=DID NOT USE CROSSWALK, 18=WALKED ON WRONG SIDE OF ROAD, 19=ELECTRONIC COMMUNICATIONS DEVICE, 20=FAILED TO YIELD RIGHT OF WAY (added August 2014), 97=OTHER, 99 UNKNOWN

ACTION: 1=GOING STRAIGHT AHEAD, 2=SLOWING IN TRAFFICWAY, 3=STOPPED IN TRAFFICWAY, 4=MAKING LEFT TURN, 5=MAKING RIGHT TURN, 6=MAKING U-TURN, 7=OVERTAKING/PASSING, 8=CHANGING LANES, 9=NEGOTIATING A CURVE, 10=BACKING, 11=AVOIDING VEH/OBJ/PED/CYCLIST/ANIMAL, 12=ENTERING PARKING POSITION, 13=LEAVING PARKING POSITION, 14=PROPERLY PARKED, 15=IMPROPERLY PARKED, 16=DRIVERLESS MOVING VEHICLE, 17=CROSSING ROAD, 18=WALKING WITH TRAFFIC, 19=WALKING AGAINST TRAFFIC, 20=STANDING, 21=LYING, 22=GETTING ON OR OFF VEHICLE, 23=WORKING ON/PUSHING VEHICLE, 24=WORKING ON ROAD, 97=OTHER, 99=UNKNOWN

MANNER OF COLLISION: 1=SINGLE VEHICLE, 2=ANGLE (front to side, other than left turn), 3=LEFT TURN, 4=REAR END (front to rear), 5=HEAD-ON (front to front, other than left turn), 6=SIDESWIPE (same direction), 7=SIDESWIPE (opposite direction), 8=REAR-TO-SIDE, 9=REAR TO REAR, 97=OTHER, 99=UNKNOWN

TOTAL 4

CITY OF SCOTTSDALE

'17 -'18 COLLISION SUMMARY

REPORT #	DATE YYMMDD	TIME HHMM	NORTH / SOUTH ST.	TYPE	EAST WEST ST.	TYPE	DIR FROM	DIST FROM	INJ. SEV. #1 #2	PHYS. COND. #1 #2	VIOLATION #1 #2	ACTION #1 #2	TRAV. DIR. #1 #2	MANNER OF COLLISION	COMMENTS
1717288	170805	1135	104	ST	HAPPY VALLEY	RD	AT		1 2 0 0		97 1	97 1	SB WB	3	
1807399	180402	2013	118	ST	RIO VERDE	DR	AT		1 0		1	1	EB	97	
1703836	170216	0447	118	ST	RIO VERDE	DR	AT		2 1 0 0		97	4 1	EB WB	3	
1803338	180211	0117	ALMA SCHOOL	RD	HAPPY VALLEY	RD	AT		3 3 4 0		5 1	1 4	SB NB	2	DUI
1715611	170714	0935	ALMA SCHOOL	RD	HAPPY VALLEY	RD	AT		3 1 0 0		2 1	1 3	SB SB	4	
1802274	180130	1831	WHISPERING WIND	DR	HAPPY VALLEY	RD	E	100	1 99		99	1	SB	97	
1727809	171216	1243	WHISPERING WIND	DR	HAPPY VALLEY	RD	S	950	1 0		1	1	NB	1	
1728744	171229	2154	WINDY WALK	DR	HAPPY VALLEY	RD	E	60	1 4		7	4	EB	3	DUI

KEY

INJURY SEVERITY:

1=NO INJURY, 2=POSSIBLE INJURY, 3=NON-INCAPACITATING INJURY, 4=INCAPACITATING INJURY, 5=FATAL INJURY, 99=NOT REPORTED / UNKNOWN

PHYSICAL CONDITION:

0=NO APPARENT INFLUENCE, 1=ILLNESS, 2=PHYSICAL IMPAIRMENT, 3=FELL ASLEEP / FATIGUED 4=ALCOHOL, 5=DRUGS, 6=MEDICATIONS, A=NO TEST GIVEN, B=TEST GIVEN, C=TEST REFUSED, D=TESTING UNKNOWN, 97=OTHER, 99=UNKNOWN

VIOLATION:

1=NO IMPROPER ACTION, 2=SPEED TOO FAST FOR CONDITIONS, 3=EXCEEDED LAWFUL SPEED 4=FOLLOWED TOO CLOSELY, 5=RAN STOP SIGN, 6=DISREGARDED TRAFFIC SIGNAL 7=MADE IMPROPER TURN, 8=DROVE/RODE IN OPPOSING TRAFFIC LANE, 9=KNOWINGLY OPERATED WITH FAULTY / MISSING EQUIPMENT, 10=REQUIRED MOTORCYCLE SAFETY EQUIPMENT NOT USED, 11=PASSED IN NO PASSING ZONE, 12=UNSAFE LANE CHANGE, 13=FAILED TO KEEP IN PROPER LANE, 14=DISREGARDED PAVEMENT MARKINGS, 15=OTHER UNSAFE PASSING, 16=INATTENTION/DISTRACTION, 17=DID NOT USE CROSSWALK, 18=WALKED ON WRONG SIDE OF ROAD, 19=ELECTRONIC COMMUNICATIONS DEVICE, 20=FAILED TO YIELD RIGHT OF WAY (added August 2014), 97=OTHER, 99 UNKNOWN

ACTION:

1=GOING STRAIGHT AHEAD, 2=SLOWING IN TRAFFICWAY, 3=STOPPED IN TRAFFICWAY, 4=MAKING LEFT TURN, 5=MAKING RIGHT TURN, 6=MAKING U-TURN, 7=OVERTAKING/PASSING, 8=CHANGING LANES, 9=NEGOTIATING A CURVE, 10=BACKING, 11=AVOIDING VEH/OBJ/PED/CYCLIST/ANIMAL, 12=ENTERING PARKING POSITION, 13=LEAVING PARKING POSITION, 14=PROPERLY PARKED, 15=IMPROPERLY PARKED, 16=DRIVERLESS MOVING VEHICLE, 17=CROSSING ROAD, 18=WALKING WITH TRAFFIC, 19=WALKING AGAINST TRAFFIC, 20=STANDING, 21=LYING, 22=GETTING ON OR OFF VEHICLE, 23=WORKING ON/PUSHING VEHICLE, 24=WORKING ON ROAD, 97=OTHER, 99=UNKNOWN

MANNER OF COLLISION:

1=SINGLE VEHICLE, 2=ANGLE (front to side, other than left turn), 3=LEFT TURN, 4=REAR END (front to rear), 5=HEAD-ON (front to front, other than left turn), 6=SIDESWIPE (same direction), 7=SIDESWIPE (opposite direction), 8=REAR-TO-SIDE, 9=REAR TO REAR, 97=OTHER, 99=UNKNOWN

TOTAL 8

Appendix C – Parcel Information



217-02-018A Agriculture Parcel

This is a agriculture parcel located at [26105 N 118TH ST SCOTTSDALE 85255](#), and the current owner is SONORAN PEAKS LLC. It is located in the Goldie Brown Pinnacle Peak Ranch Unit 2 Survey subdivision and MCR 19426. Its current year full cash value is \$998.

Property Information

26105 N 118TH ST SCOTTSDALE 85255

MCR #	<u>19426</u>
Description:	THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO MCR 194-26 N2 PARCEL 4
Lat/Long	<u>33.71890419 -111.82640848</u>
Lot Size	869,022 sq ft.
Zoning	R1-130
Lot #	4
High School District	CAVE CREEK UNIFIED #93
Elementary School District	CAVE CREEK UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	3 4N 5E
Market Area/Neighborhood	07/005
Subdivision (78 Parcels)	<u>GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 SURVEY</u>

Owner Information**SONORAN PEAKS LLC**

Mailing Address 14901 N SCOTTSDALE RD STE 201 , SCOTTSDALE, AZ 85254

Deed Number 041018214

Last Deed Date 08/31/2004

Sale Date n/a

Sale Price n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our [data sales](#).

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program.

[CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)

Tax Year	2018	2017	2016	2015	2014
Full Cash Value	\$998	\$1,197	\$1,397	\$1,397	\$1,596
Limited Property Value	\$998	\$1,197	\$1,397	\$1,397	\$1,452
Legal Class	2	2	2	2	2
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15%	15%	15%	16%	16%
Assessed FCV	n/a	n/a	n/a	n/a	\$255
Assessed LPV	\$150	\$180	\$210	\$224	\$232
Property Use Code	4710	4710	4710	4710	4710
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	931400	931400	931400	931400	931400
Valuation Source	Notice	Notice	Notice	Decision	Notice

Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below.

APN	Address	Sale Info	FCV	Size	Livable Sq Ft	Year Built	Pool	Foreclosed
-----	---------	-----------	-----	------	---------------	------------	------	------------

217-02-018B Agriculture Parcel

This is a agriculture parcel and the current owner is SONORAN PEAKS LLC. It is located in the Goldie Brown Pinnacle Peak Ranch Unit 2 Survey subdivision and MCR 19426. Its current year full cash value is \$998.

Property Information

MCR #	<u>19426</u>
Description:	THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO MCR 194-26 S2 PARCEL 4
Lat/Long	
Lot Size	869,022 sq ft.
Zoning	R1-130
Lot #	4
High School District	CAVE CREEK UNIFIED #93
Elementary School District	CAVE CREEK UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	3 4N 5E
Market Area/Neighborhood	07/005
Subdivision (78 Parcels)	<u>GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 SURVEY</u>

Owner Information**SONORAN PEAKS LLC**

Mailing Address 14901 N SCOTTSDALE RD STE 201 , SCOTTSDALE, AZ 85254

Deed Number 041018214

Last Deed Date 08/31/2004

Sale Date n/a

Sale Price n/a

Valuation Information

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The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program.

[CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)

Tax Year	2018	2017	2016	2015	2014
Full Cash Value	\$998	\$1,197	\$1,397	\$1,397	\$1,596
Limited Property Value	\$998	\$1,197	\$1,397	\$1,397	\$1,452
Legal Class	2	2	2	2	2
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15%	15%	15%	16%	16%
Assessed FCV	n/a	n/a	n/a	n/a	\$255
Assessed LPV	\$150	\$180	\$210	\$224	\$232
Property Use Code	4710	4710	4710	4710	4710
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	931400	931400	931400	931400	931400
Valuation Source	Notice	Notice	Notice	Decision	Notice

Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below

APN	Address	Sale Info	FCV	Size	Livable Sq Ft	Year Built	Pool	Foreclosed
-----	---------	-----------	-----	------	---------------	------------	------	------------

217-02-019C Agriculture Parcel

This is a agriculture parcel and the current owner is SONORAN PEAKS LLC. It is located in the Goldie Brown Pinnacle Peak Ranch Unit 2 Survey subdivision and MCR 19426. Its current year full cash value is \$506.

Property Information

MCR #	19426
Description:	THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 MCR 194/26 PT PARCEL 5 DAF BEG SW COR SD PARCEL TH N 950.84F E 604.09F S 466.49F W 276.94F S 482.68F W 326.91F TO TPOB
Lat/Long	
Lot Size	440,628 sq ft.
Zoning	R1-130
Lot #	5
High School District	CAVE CREEK UNIFIED #93
Elementary School District	CAVE CREEK UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	3 4N 5E
Market Area/Neighborhood	07/005
Subdivision (78 Parcels)	GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 SURVEY

Owner Information**SONORAN PEAKS LLC**

Mailing Address 14901 N SCOTTSDALE RD STE 201 , SCOTTSDALE, AZ 85254

Deed Number [041018214](#)

Last Deed Date 08/31/2004

Sale Date n/a

Sale Price n/a

Valuation Information

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The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program.

[CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)

Tax Year	2018	2017	2016	2015	2014
Full Cash Value	\$506	\$607	\$708	\$708	\$809
Limited Property Value	\$506	\$607	\$708	\$708	\$736
Legal Class	2	2	2	2	2
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15%	15%	15%	16%	15.9%
Assessed FCV	n/a	n/a	n/a	n/a	\$129
Assessed LPV	\$76	\$91	\$106	\$113	\$117
Property Use Code	4710	4710	4710	4710	4710
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	931400	931400	931400	931400	931400
Valuation Source	Notice	Notice	Notice	Decision	Notice

Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below.

APN Address Sale Info FCV Size Livable Sq Ft Year Built Pool Foreclosed

217-02-019D Agriculture Parcel

This is a agriculture parcel and the current owner is SONORAN PEAKS LLC. It is located in the Goldie Brown Pinnacle Peak Ranch Unit 2 Survey subdivision and MCR 19426. Its current year full cash value is \$464.

Property Information

MCR #	<u>19426</u>
Description:	THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 MCR 194/26 PT PARCEL 5 DAF COM SE COR SD PARCEL TH N 386.98F TO TPOB W 712.25F N 567.22F E 712.25F S 567.22F TO TPOB
Lat/Long	
Lot Size	404,001 sq ft.
Zoning	R1-130
Lot #	5
High School District	CAVE CREEK UNIFIED #93
Elementary School District	CAVE CREEK UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	3 4N 5E
Market Area/Neighborhood	07/005
Subdivision (78 Parcels)	<u>GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 SURVEY</u>

Owner Information**SONORAN PEAKS LLC**

Mailing Address 14901 N SCOTTSDALE RD STE 201 , SCOTTSDALE, AZ 85254

Deed Number 041018214

Last Deed Date 08/31/2004

Sale Date n/a

Sale Price n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our [data sales](#).

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program.

[CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)

Tax Year	2018	2017	2016	2015	2014
Full Cash Value	\$464	\$557	\$649	\$649	\$742
Limited Property Value	\$464	\$557	\$649	\$649	\$675
Legal Class	2	2	2	2	2
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.1%	15.1%	14.9%	16%	16%
Assessed FCV	n/a	n/a	n/a	n/a	\$119
Assessed LPV	\$70	\$84	\$97	\$104	\$108
Property Use Code	4710	4710	4710	4710	4710
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	931400	931400	931400	931400	931400
Valuation Source	Notice	Notice	Resolution	Decision	Notice

Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below.

APN Address Sale Info FCV Size Livable Sq Ft Year Built Pool Foreclosed

217-02-019E Agriculture Parcel

This is a agriculture parcel and the current owner is SONORAN PEAKS LLC. It is located in the Goldie Brown Pinnacle Peak Ranch Unit 2 Survey subdivision and MCR 19426. Its current year full cash value is \$470.

Property Information

MCR #	<u>19426</u>
Description:	THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 MCR 194/26 PT PARCEL 5 DAF BEG SE COR SD PARCEL TH W 989.19F N 482.68F E 276.94F S 100.73F E 712.25F TH S 386.98F TO TPOB
Lat/Long	
Lot Size	409,097 sq ft.
Zoning	R1-130
Lot #	5
High School District	CAVE CREEK UNIFIED #93
Elementary School District	CAVE CREEK UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	3 4N 5E
Market Area/Neighborhood	07/005
Subdivision (78 Parcels)	<u>GOLDIE BROWN PINNACLE PEAK RANCH UNIT 2 SURVEY</u>

Owner Information

SONORAN PEAKS LLC

Mailing Address 14901 N SCOTTSDALE RD STE 201 , SCOTTSDALE, AZ 85254

Deed Number 041018214

Last Deed Date 08/31/2004

Sale Date n/a

Sale Price n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our [data sales](#).

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program.

[CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL](#)

Tax Year	2018	2017	2016	2015	2014
Full Cash Value	\$470	\$564	\$657	\$657	\$751
Limited Property Value	\$470	\$564	\$657	\$657	\$683
Legal Class	2	2	2	2	2
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.1%	15.1%	15.1%	16%	16%
Assessed FCV	n/a	n/a	n/a	n/a	\$120
Assessed LPV	\$71	\$85	\$99	\$105	\$109
Property Use Code	4710	4710	4710	4710	4710
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	931400	931400	931400	931400	931400
Valuation Source	Notice	Notice	Notice	Decision	Notice

Similar Parcels

Parcels that are similar to this one (known as the reference parcel) are displayed below.

APN Address Sale Info FCV Size Livable Sq Ft Year Built Pool Foreclosed

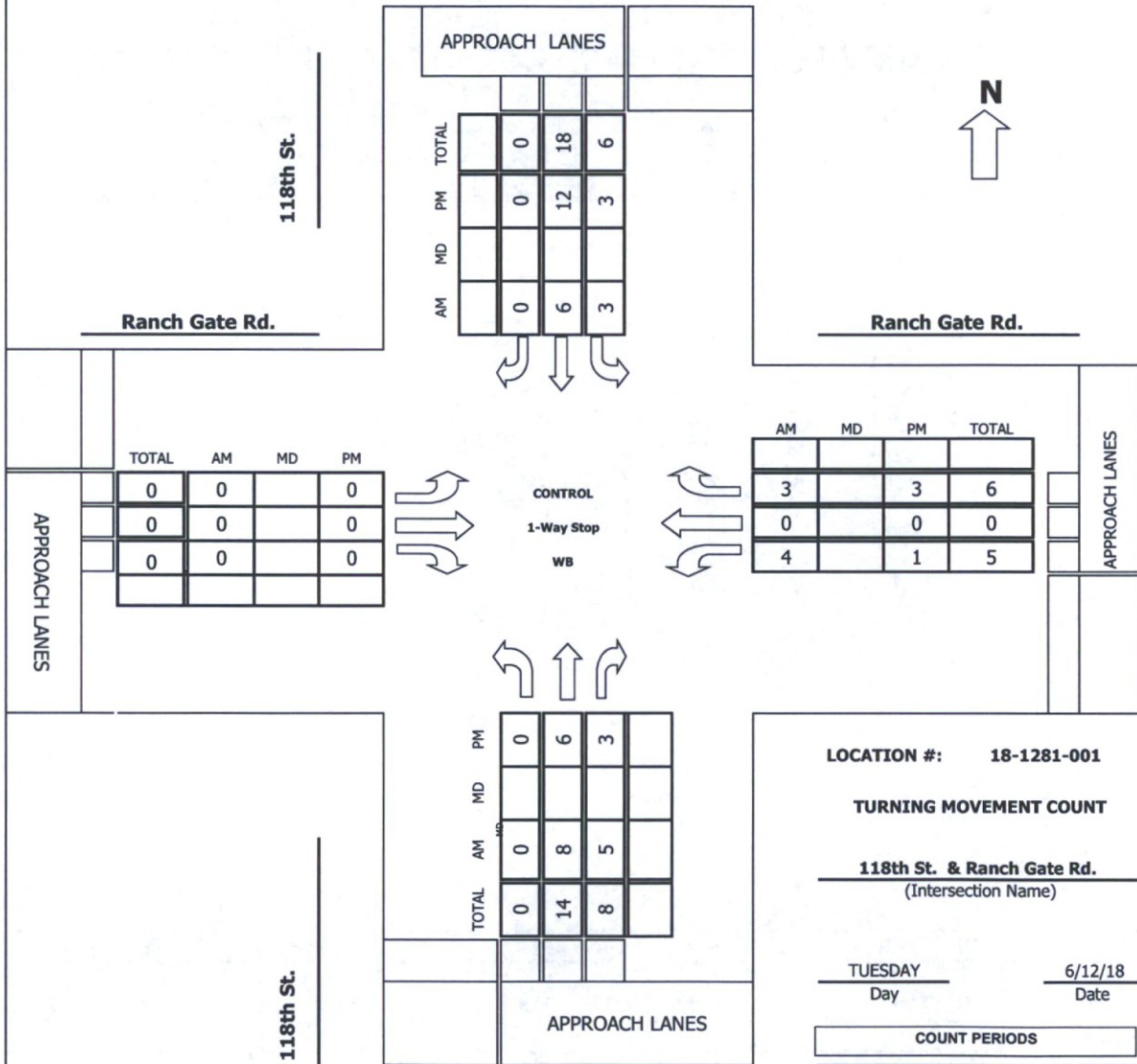
Appendix D – Traffic Counts

**Intersection Turning Movement
Prepared by:**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1281-001

TMC SUMMARY OF 118th St. & Ranch Gate Rd.



LOCATION #: 18-1281-001

TURNING MOVEMENT COUNT

118th St. & Ranch Gate Rd.
(Intersection Name)

TUESDAY
Day

6/12/18
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: 118th St.

DATE: 6/12/18

LOCATION: Scottsdale

E-W STREET: Ranch Gate Rd.

DAY: TUESDAY

PROJECT# 18-1281-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	3	0	2	0	0	0	0	1	0	2	8
7:15 AM	0	1	0	0	1	0	0	0	0	2	0	1	5
7:30 AM	0	1	0	0	2	0	0	0	0	3	0	0	6
7:45 AM	0	1	2	1	1	0	0	0	0	1	0	2	8
8:00 AM	0	3	3	0	2	0	0	0	0	0	0	0	8
8:15 AM	0	2	0	2	2	0	0	0	0	1	0	0	7
8:30 AM	0	2	0	0	1	0	0	0	0	2	0	1	6
8:45 AM	0	1	1	1	1	0	0	0	0	0	0	0	4
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	11	9	4	12	0	0	0	0	10	0	6	52
Approach %	0.00	55.00	45.00	25.00	75.00	0.00	####	####	####	62.50	0.00	37.50	
App/Depart	20	/	17	16	/	22	0	/	13	16	/	0	

AM Peak Hr Begins at: 745 AM

PEAK

Volumes	0	8	5	3	6	0	0	0	0	4	0	3	29
Approach %	0.00	61.54	38.46	33.33	66.67	0.00	####	####	####	57.14	0.00	42.86	

PEAK HR.

FACTOR:	0.542	0.563	0.000	0.583	0.906
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CONTROL: 1-Way Stop (WB)

COMMENT 1:

GPS: 33.716221, -111.826405

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: 118th St.

DATE: 6/12/18

LOCATION: Scottsdale

E-W STREET: Ranch Gate Rd.

DAY: TUESDAY

PROJECT# 18-1281-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	2	4	0	0	0	0	1	0	1	8
4:15 PM	0	3	0	1	4	0	0	0	0	0	0	1	9
4:30 PM	0	2	1	0	1	0	0	0	0	0	0	1	5
4:45 PM	0	1	2	0	3	0	0	0	0	0	0	0	6
5:00 PM	0	3	1	0	2	0	0	0	0	0	0	0	6
5:15 PM	0	1	0	1	3	0	0	0	0	0	0	1	6
5:30 PM	0	3	0	1	4	0	0	0	0	0	0	0	8
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	13	4	5	22	0	0	0	0	1	0	4	49
Approach %	0.00	76.47	23.53	18.52	81.48	0.00	####	####	####	20.00	0.00	80.00	
App/Depart	17	/	17	27	/	23	0	/	9	5	/	0	

PM Peak Hr Begins at: 400 PM

PEAK

Volumes	0	6	3	3	12	0	0	0	0	1	0	3	28
Approach %	0.00	66.67	33.33	20.00	80.00	0.00	####	####	####	25.00	0.00	75.00	

PEAK HR.

FACTOR:	0.750	0.625	0.000	0.500	0.778
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CONTROL: 1-Way Stop (WB)

COMMENT 1: 0

GPS: 33.716221, -111.826405



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: 118th St.
E-W STREET: Ranch Gate Rd.

Date: 6/12/18
Day: TUESDAY

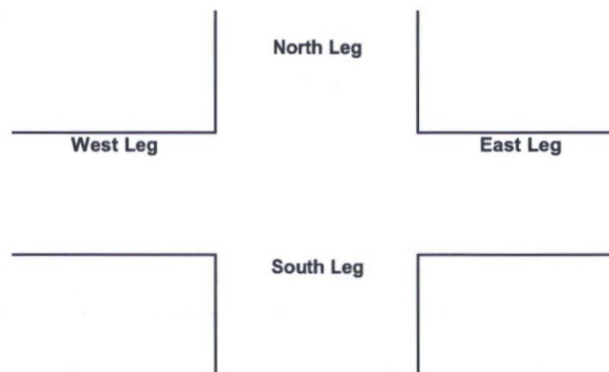
City: Scottsdale
Project #: 18-1281-001

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	0	0	0	0

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	0	0	0	0

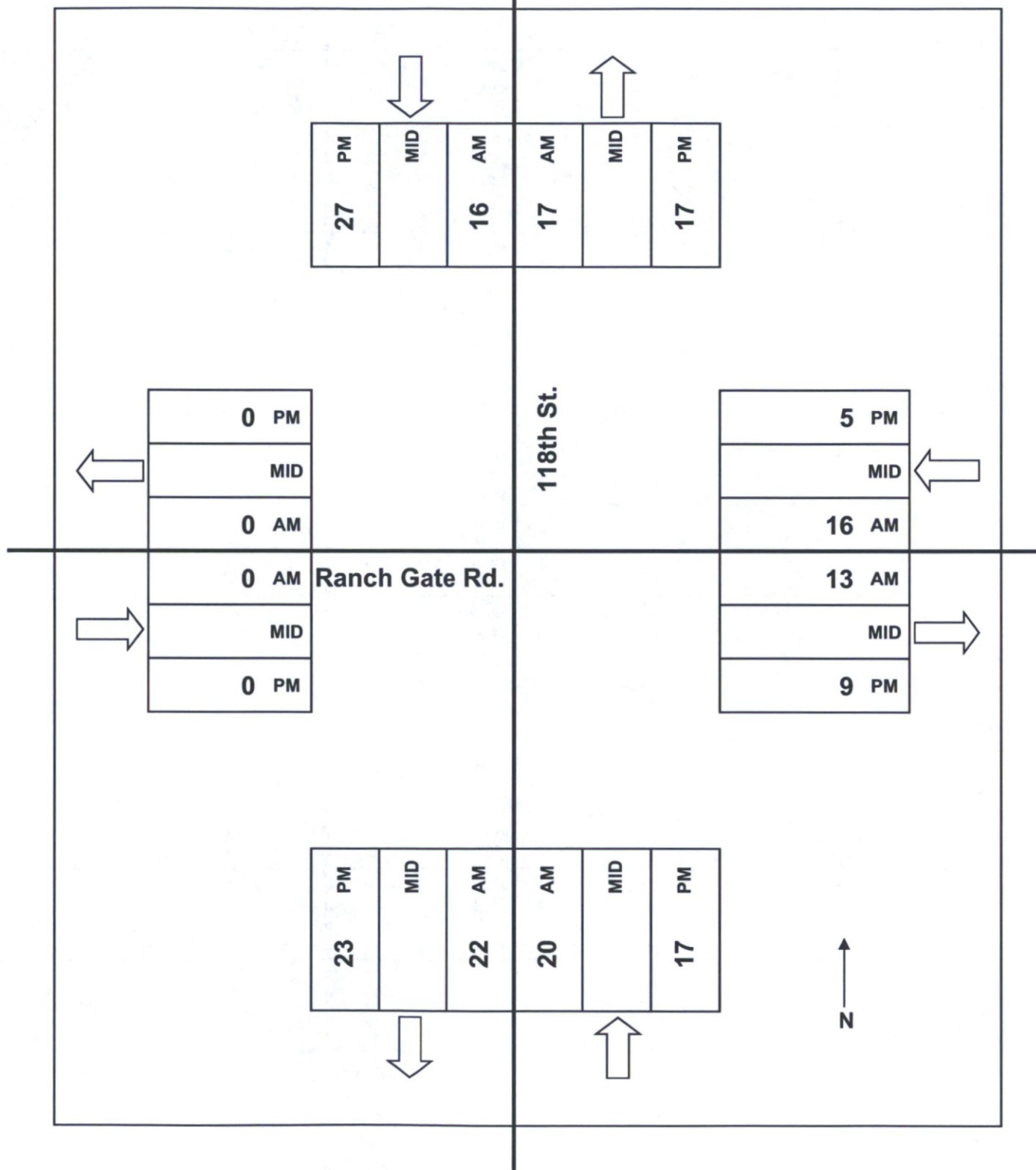
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	0	0	0	0

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	0	0	0	0



JOB# 18-1281-001
VALIDATED: _____

DATE: 6/12/18
DAY: TUESDAY



Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, June 12, 2018

City: Scottsdale

Project #: 18-1281-002

Location: 118th St. north of Ranch Gate Rd.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	0	0			12:00	1	1		
00:15	1	0			12:15	2	2		
00:30	0	0			12:30	4	4		
00:45	0	1	0	0	12:45	3	10	2	9
01:00	0	0			13:00	0	4		
01:15	1	0			13:15	1	0		
01:30	0	0			13:30	5	1		
01:45	0	1	0	0	13:45	2	8	2	7
02:00	0	0			14:00	5	1		
02:15	0	0			14:15	2	2		
02:30	0	0			14:30	1	2		
02:45	0	0	0	0	14:45	1	9	4	9
03:00	0	0			15:00	2	0		
03:15	0	0			15:15	2	5		
03:30	0	0			15:30	2	2		
03:45	0	0	0	0	15:45	0	6	1	8
04:00	0	0			16:00	2	6		
04:15	0	0			16:15	3	4		
04:30	0	0			16:30	2	1		
04:45	0	0	0	0	16:45	2	9	3	14
05:00	0	0			17:00	3	1		
05:15	0	1			17:15	2	5		
05:30	1	1			17:30	3	5		
05:45	4	5	1	3	17:45	0	8	1	12
06:00	4	1			18:00	1	0		
06:15	2	3			18:15	1	2		
06:30	1	3			18:30	1	2		
06:45	1	8	1	8	18:45	2	5	3	7
07:00	3	1			19:00	3	2		
07:15	0	2			19:15	4	1		
07:30	3	2			19:30	4	1		
07:45	4	10	2	7	19:45	0	11	5	9
08:00	2	3			20:00	1	2		
08:15	2	0			20:15	1	1		
08:30	1	2			20:30	0	1		
08:45	1	6	3	8	20:45	0	2	1	5
09:00	2	0			21:00	0	1		
09:15	2	0			21:15	0	0		
09:30	5	6			21:30	1	1		
09:45	4	13	3	9	21:45	1	2	0	2
10:00	6	4			22:00	0	0		
10:15	6	4			22:15	1	0		
10:30	8	3			22:30	0	0		
10:45	4	24	2	13	22:45	0	1	0	0
11:00	3	2			23:00	0	0		
11:15	3	2			23:15	0	0		
11:30	2	1			23:30	0	0		
11:45	1	9	1	6	23:45	0	0	0	0

Total Vol.	77	54	131	71	82	153
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GPS Coordinates: 33.716903, -111.826378

				Daily Totals			
				NB	SB	EB	WB
				148	136		284
AM				PM			
Split %	58.8%	41.2%	46.1%	46.4%	53.6%		53.9%
Peak Hour	09:45	09:30	09:30	13:30	15:15		16:45
Volume	24	17	38	14	14		24
P.H.F.	0.75	0.71	0.86	0.70	0.58		0.75

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, June 12, 2018

City: Scottsdale

Project #: 18-1281-003

Location: Ranch Gate Rd. east of 118th St.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			0	0	12:00			0	0
00:15			0	0	12:15			1	1
00:30			0	0	12:30			0	0
00:45			0	0	12:45			1	2
01:00			0	0	13:00			3	0
01:15			0	0	13:15			1	1
01:30			0	0	13:30			3	1
01:45			0	0	13:45			0	7
02:00			0	0	14:00			3	3
02:15			0	0	14:15			1	2
02:30			0	0	14:30			3	4
02:45			0	0	14:45			0	7
03:00			0	0	15:00			1	0
03:15			0	0	15:15			3	0
03:30			0	0	15:30			0	1
03:45			0	0	15:45			1	5
04:00			0	0	16:00			2	3
04:15			0	0	16:15			1	0
04:30			0	0	16:30			1	1
04:45			1	1	16:45			2	6
05:00			3	0	17:00			1	0
05:15			0	0	17:15			1	1
05:30			3	0	17:30			1	0
05:45			0	6	17:45			0	3
06:00			2	0	18:00			2	0
06:15			2	2	18:15			0	2
06:30			2	2	18:30			1	2
06:45			3	9	18:45			2	5
07:00			3	2	19:00			0	2
07:15			0	2	19:15			0	1
07:30			0	4	19:30			0	1
07:45			3	6	19:45			1	1
08:00			3	0	20:00			1	1
08:15			2	1	20:15			0	3
08:30			0	2	20:30			0	0
08:45			1	6	20:45			0	1
09:00			2	2	21:00			0	1
09:15			0	2	21:15			1	0
09:30			0	3	21:30			0	0
09:45			1	3	21:45			1	2
10:00			0	2	22:00			0	0
10:15			1	2	22:15			0	0
10:30			2	3	22:30			0	0
10:45			0	3	22:45			0	0
11:00			0	0	23:00			0	0
11:15			1	0	23:15			0	0
11:30			2	3	23:30			0	0
11:45			0	3	23:45			0	0

Total Vol. 37 42 79 39 39 78

GPS Coordinates: 33.716207, -111.825428

Daily Totals				
NB	SB	EB	WB	Combined
		76	81	157

AM				PM		
Split %	46.8%	53.2%	50.3%	50.0%	50.0%	49.7%
Peak Hour	06:15	07:00	06:15	12:45	13:45	13:45
Volume	10	11	17	8	13	20
P.H.F.	0.83	0.69	0.85	0.67	0.81	0.71

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, June 12, 2018

City: Scottsdale

Project #: 18-1281-004

Location: Jomax Rd. btwn Alma School Rd. & 118th St.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			0	1	12:00			20	13
00:15			0	0	12:15			9	10
00:30			1	0	12:30			18	21
00:45			0	1	12:45			15	62
01:00			0	0	13:00			13	19
01:15			0	0	13:15			11	17
01:30			0	1	13:30			19	14
01:45			0	0	13:45			13	56
02:00			0	0	14:00			15	13
02:15			0	0	14:15			12	10
02:30			0	0	14:30			12	13
02:45			1	1	14:45			12	51
03:00			0	2	15:00			11	15
03:15			0	0	15:15			17	10
03:30			0	0	15:30			9	16
03:45			0	0	15:45			10	47
04:00			0	1	16:00			14	6
04:15			0	1	16:15			18	8
04:30			1	0	16:30			19	11
04:45			0	1	16:45			22	73
05:00			1	4	17:00			10	14
05:15			3	4	17:15			18	6
05:30			2	3	17:30			12	11
05:45			6	12	17:45			13	53
06:00			6	10	18:00			13	9
06:15			4	9	18:15			8	7
06:30			13	11	18:30			9	4
06:45			17	40	18:45			12	42
07:00			10	17	19:00			7	6
07:15			5	12	19:15			8	4
07:30			7	17	19:30			12	5
07:45			9	31	19:45			10	37
08:00			7	24	20:00			7	5
08:15			11	15	20:15			8	3
08:30			15	23	20:30			4	2
08:45			13	46	20:45			8	27
09:00			12	17	21:00			6	0
09:15			9	18	21:15			3	0
09:30			10	15	21:30			4	1
09:45			14	45	21:45			6	19
10:00			10	18	22:00			2	0
10:15			8	15	22:15			2	1
10:30			19	13	22:30			1	0
10:45			11	48	22:45			3	8
11:00			12	15	23:00			0	1
11:15			9	14	23:15			0	1
11:30			16	14	23:30			0	0
11:45			18	55	23:45			0	0

Total Vol. 280 409 **689** 475 361 **836**

GPS Coordinates: 33.726805, -111.839763

		Daily Totals		
NB	SB	EB	WB	Combined
		755	770	1525

		AM			PM		
Split %		40.6%	59.4%	45.2%	56.8%	43.2%	54.8%
Peak Hour		11:45	08:00	08:00	16:00	13:00	13:00
Volume		65	86	132	73	71	127
P.H.F.		0.81	0.90	0.87	0.83	0.85	0.93

Appendix E – Existing Capacity Analysis



1: 118th Street & Ranch Gate Road

07/09/2018

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	5	0	4	0	10	6	4	8	0
Future Vol, veh/h	0	0	0	5	0	4	0	10	6	4	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	0	4	0	11	7	4	9	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	34	36	9	32	32	14	9	0	0	18	0	0
Stage 1	18	18	-	14	14	-	-	-	-	-	-	-
Stage 2	16	18	-	18	18	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	973	856	1073	976	861	1066	1611	-	-	1599	-	-
Stage 1	1001	880	-	1006	884	-	-	-	-	-	-	-
Stage 2	1004	880	-	1001	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	967	853	1073	974	858	1066	1611	-	-	1599	-	-
Mov Cap-2 Maneuver	967	853	-	974	858	-	-	-	-	-	-	-
Stage 1	1001	877	-	1006	884	-	-	-	-	-	-	-
Stage 2	1000	880	-	998	877	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	0	2.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1611	-	-	-	1013	1599	-	-
HCM Lane V/C Ratio	-	-	-	-	0.01	0.003	-	-
HCM Control Delay (s)	0	-	-	0	8.6	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

1: 118th Street & Ranch Gate Road

07/09/2018

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	2	0	4	0	8	4	4	15	0
Future Vol, veh/h	0	0	0	2	0	4	0	8	4	4	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	0	5	0	10	5	5	19	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	44	44	19	42	42	13	19	0	0	15	0	0
Stage 1	29	29	-	13	13	-	-	-	-	-	-	-
Stage 2	15	15	-	29	29	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	958	848	1059	961	850	1067	1597	-	-	1603	-	-
Stage 1	988	871	-	1007	885	-	-	-	-	-	-	-
Stage 2	1005	883	-	988	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	951	845	1059	959	847	1067	1597	-	-	1603	-	-
Mov Cap-2 Maneuver	951	845	-	959	847	-	-	-	-	-	-	-
Stage 1	988	868	-	1007	885	-	-	-	-	-	-	-
Stage 2	1000	883	-	985	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.5	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1597	-	-	-	1028	1603	-
HCM Lane V/C Ratio	-	-	-	-	0.007	0.003	-
HCM Control Delay (s)	0	-	-	0	8.5	7.3	0
HCM Lane LOS	A	-	-	A	A	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-

Appendix F – Trip Generation





Completed	TG	10/17/2017
Checked	JKB	7/20/2018

Existing Zoning

Single-Family Detached Housing																					Average	
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In		Out
Single-Family Detached Housing	210	21	Dwelling Units	9.44	50%	50%	0.74	25%	75%	0.99	63%	37%	199	100	100	16	4	12	21	13		8
Single-Family Detached Housing	210	21	Dwelling Units	4.81	50%	50%	0.33	25%	75%	0.44	63%	37%	102	51	51	7	2	5	10	6	4	
Single-Family Detached Housing	210	21	Dwelling Units	19.39	50%	50%	2.27	25%	75%	2.98	63%	37%	408	204	204	48	12	36	63	40	23	
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Single-Family Detached Housing	210	21	Dwelling Units	$\ln(T)=0.92\ln(X)+2.71$	50%	50%	$T=0.71(X)+4.80$	25%	75%	$\ln(T)=0.96\ln(X)+0.20$	63%	37%	248	124	124	20	5	15	23	14	9	
Single-Family Detached Housing	Standard Deviation			2.10			0.27			0.31												
	Number of Studies			159			173			190												
	Average Size			264			219			242												



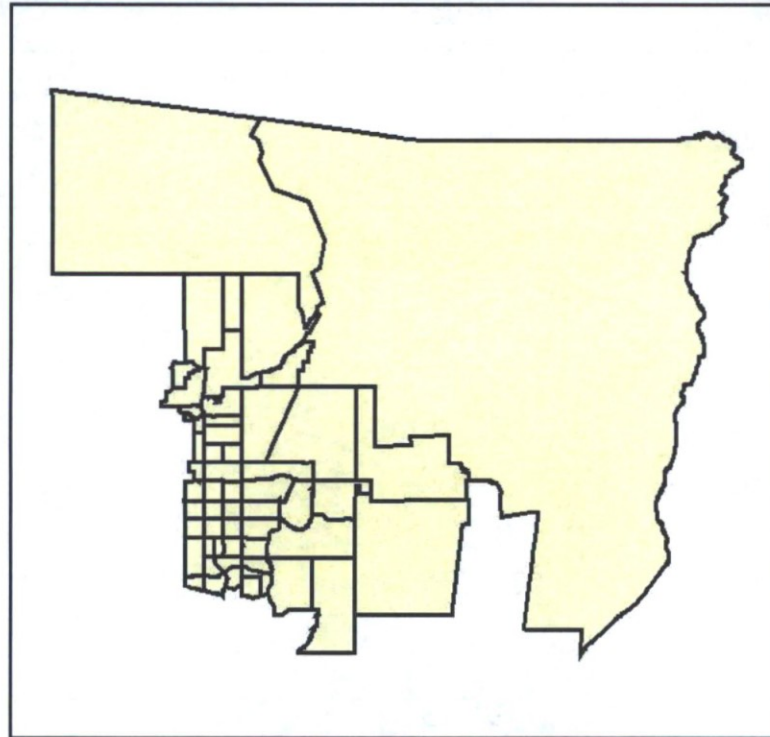
engineering and environmental design Trip Generation Calculations

210 Single-Family Detached Housing

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Single-Family Detached Housing	210	42	Dwelling Units	9.44	50%	50%	0.74	25%	75%	0.99	63%	37%	397	199	199	32	8	24	42	26	16	Average
Single-Family Detached Housing	210	42	Dwelling Units	4.81	50%	50%	0.33	25%	75%	0.44	63%	37%	203	102	102	14	4	11	19	12	7	Minimum
Single-Family Detached Housing	210	42	Dwelling Units	19.39	50%	50%	2.27	25%	75%	2.98	63%	37%	815	408	408	96	24	72	126	79	47	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Single-Family Detached Housing	210	42	Dwelling Units	$\ln(T)=0.92\ln(X)+2.71$	50%	50%	$T=0.71(X)+4.80$	25%	75%	$\ln(T)=0.96\ln(X)+0.20$	63%	37%	469	235	234	35	9	26	45	28	17	Equation
Single-Family Detached Housing	Standard Deviation			2.10			0.27			0.31												
	Number of Studies			159			173			190												
	Average Size			264			219			242												

Appendix G – Maricopa Association of Governments Population Projection

Selected Traffic Analysis Zones Projections Report

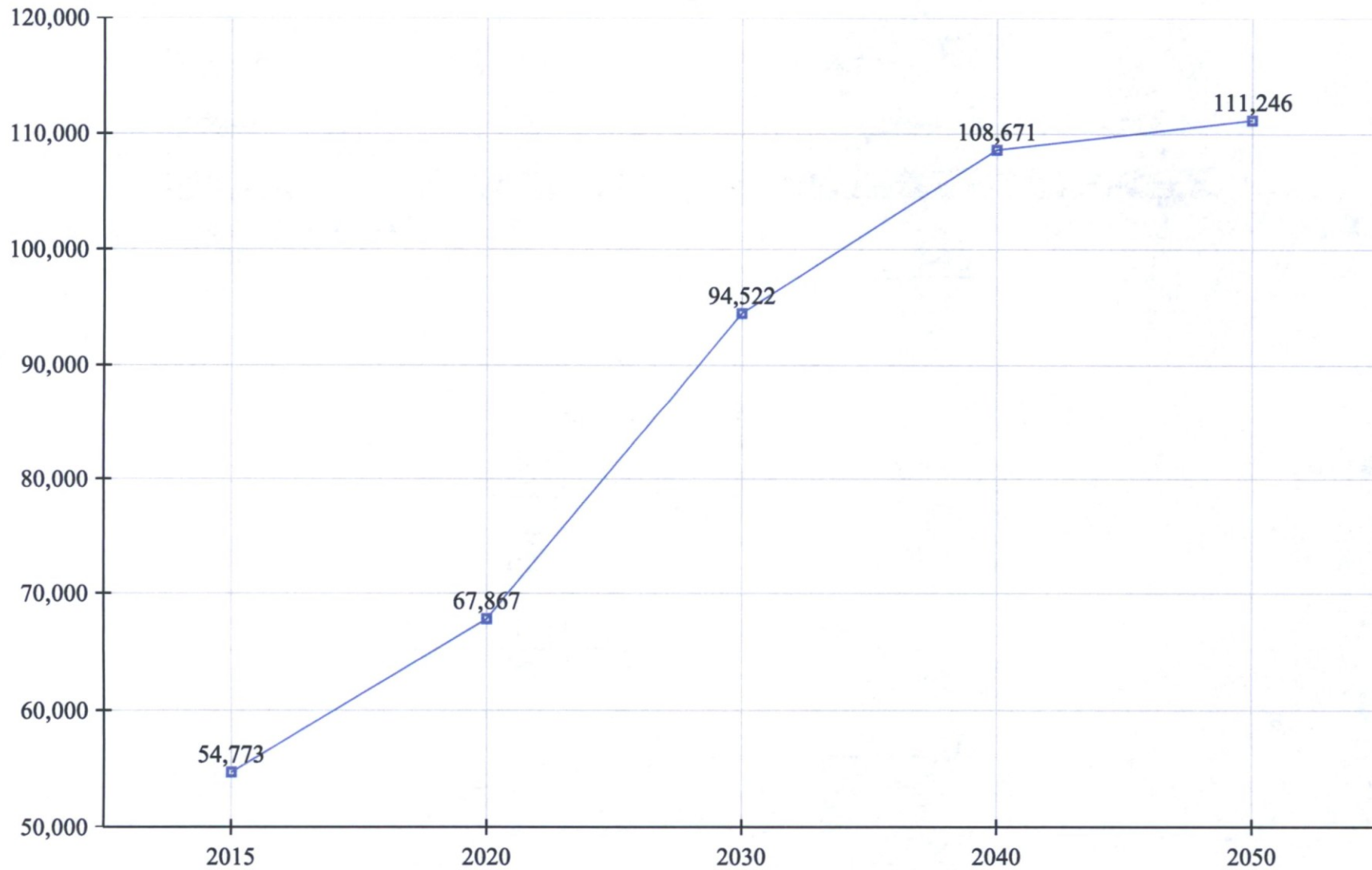


Projections summary:

	2015	2020	2030	2040	2050
Total Population	54,773	67,867	94,522	108,671	111,246
Household Population	54,630	67,690	94,241	108,275	110,778
Households	23,695	28,739	38,546	43,462	44,354
Dwelling Units	30,513	34,271	44,336	49,238	49,836
Total Employment	23,967	27,069	35,704	39,556	47,979

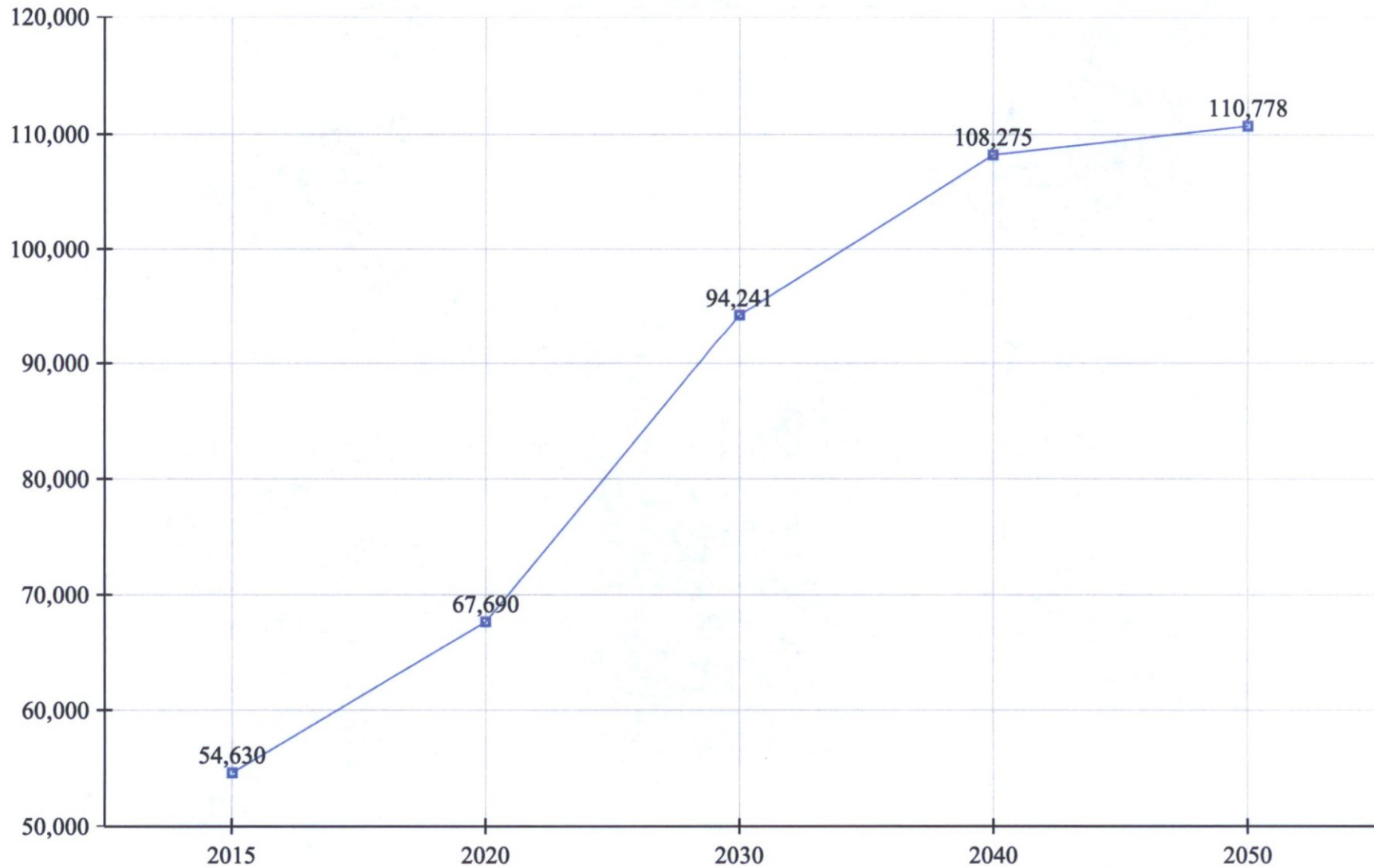
Selected Traffic Analysis Zones Projections Report

Total Population



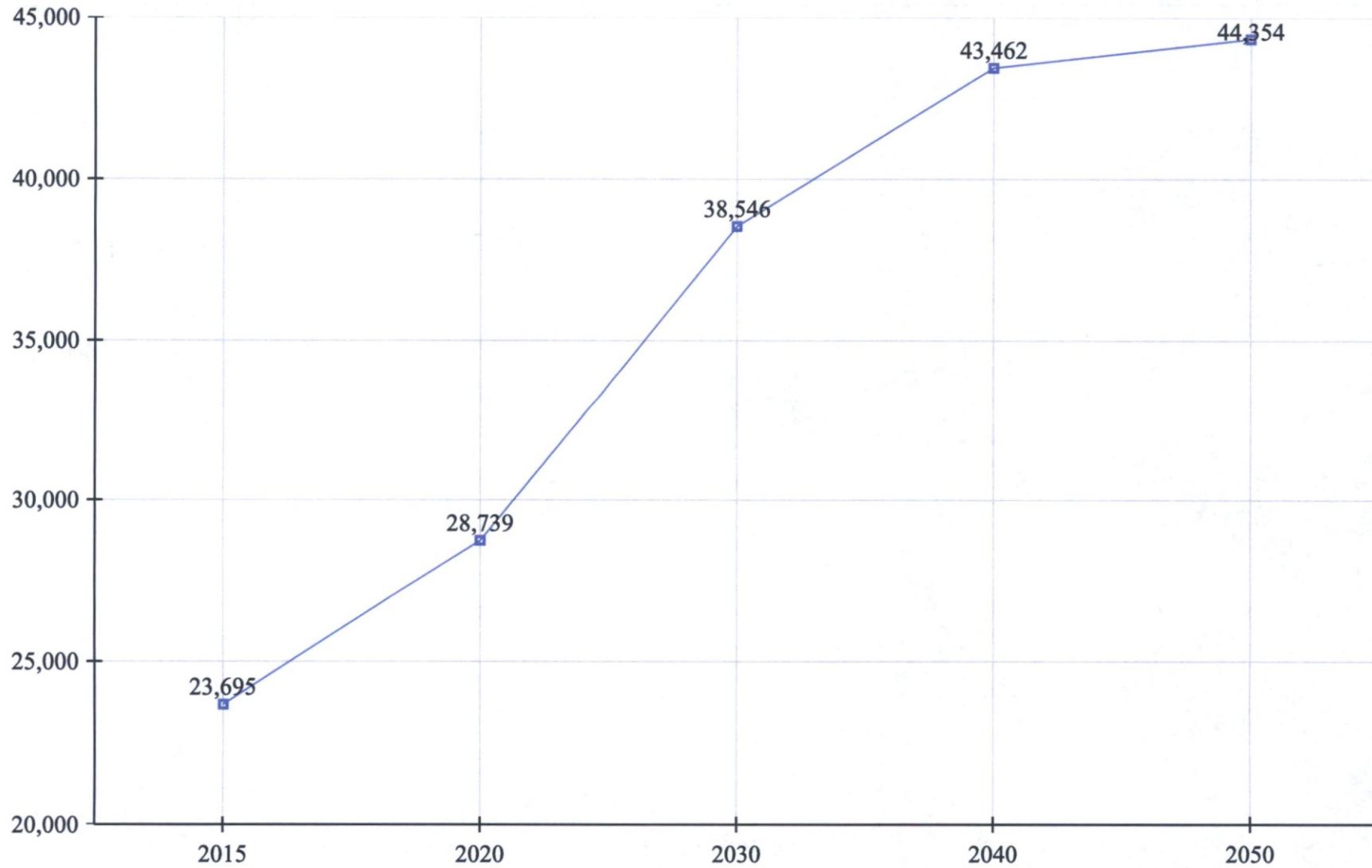
Selected Traffic Analysis Zones Projections Report

Household Population



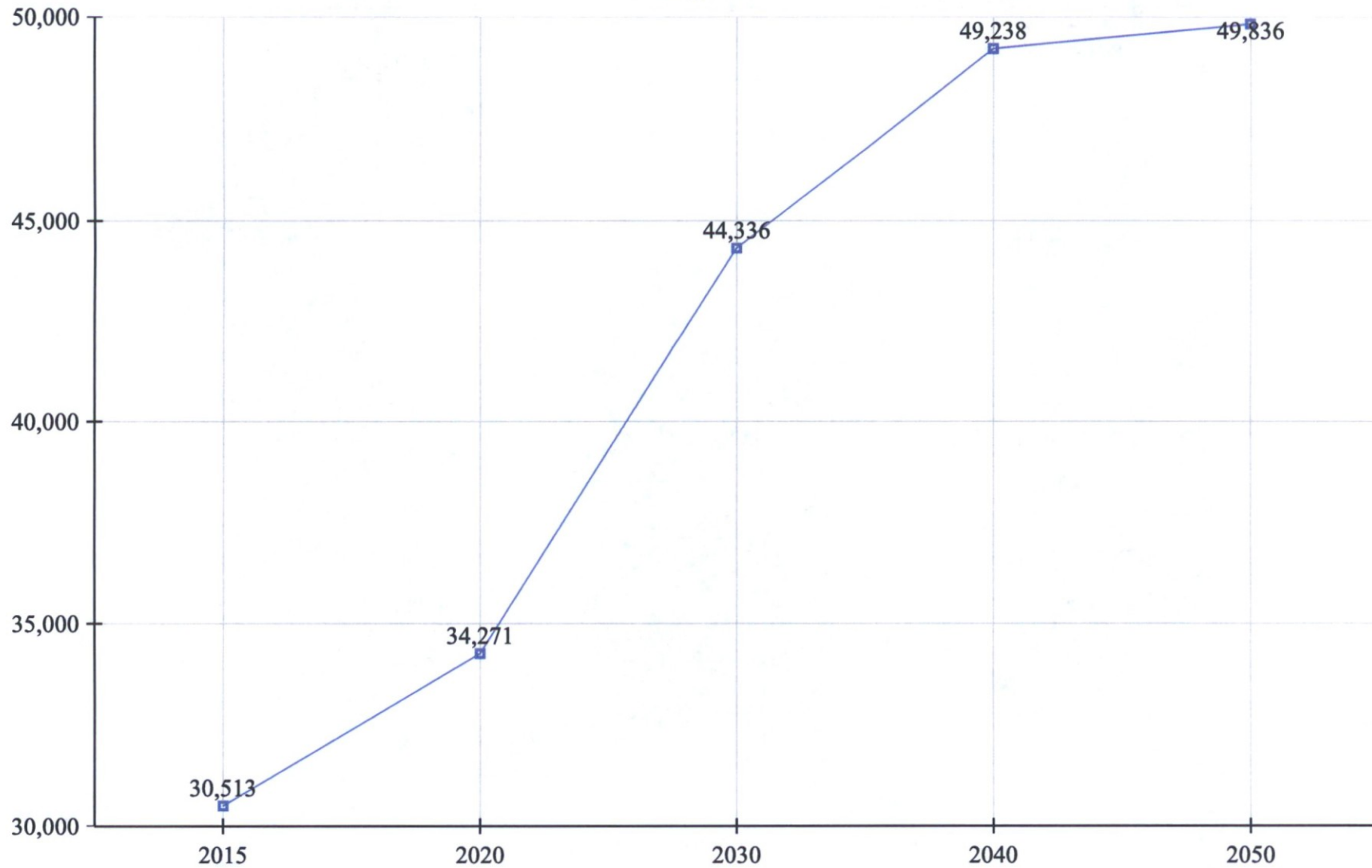
Selected Traffic Analysis Zones Projections Report

Households



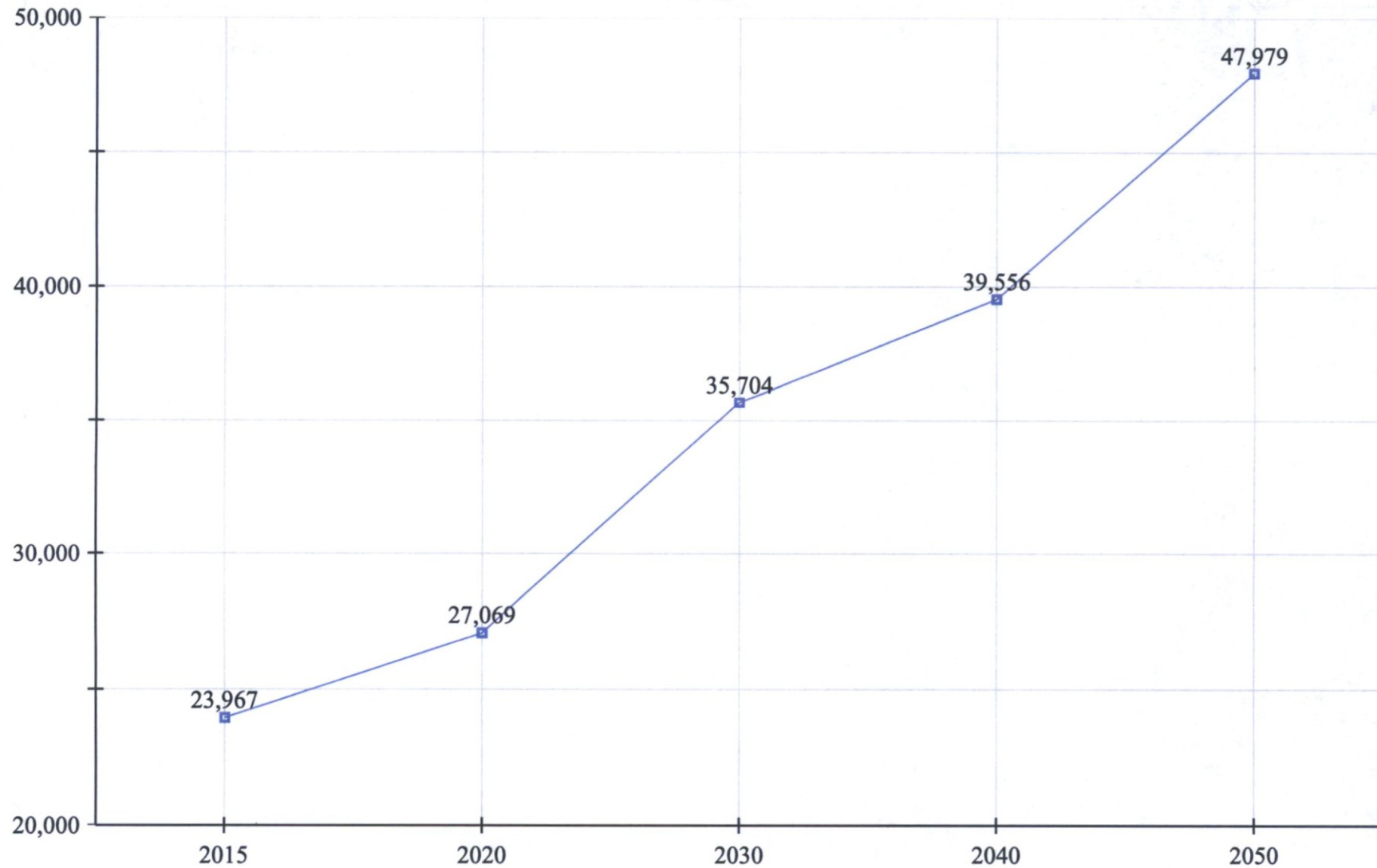
Selected Traffic Analysis Zones Projections Report

Dwelling Units



Selected Traffic Analysis Zones Projections Report

Total Employment



Selected Traffic Analysis Zones Projections Report



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To provide comments or report problems please contact [Jason Howard, GIS Program Manager](#)

Appendix H – Year 2020 No Build Capacity Analysis



Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	6	0	5	0	11	7	5	9	0
Future Vol, veh/h	0	0	0	6	0	5	0	11	7	5	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	7	0	5	0	12	8	5	10	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	39	41	10	37	37	16	10	0	0	20	0	0
Stage 1	21	21	-	16	16	-	-	-	-	-	-	-
Stage 2	18	20	-	21	21	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	966	851	1071	968	855	1063	1610	-	-	1596	-	-
Stage 1	998	878	-	1004	882	-	-	-	-	-	-	-
Stage 2	1001	879	-	998	878	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	959	848	1071	966	852	1063	1610	-	-	1596	-	-
Mov Cap-2 Maneuver	959	848	-	966	852	-	-	-	-	-	-	-
Stage 1	998	875	-	1004	882	-	-	-	-	-	-	-
Stage 2	996	879	-	995	875	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		8.6		0		2.6	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1610	-	-	-	1008	1596	-
HCM Lane V/C Ratio	-	-	-	-	0.012	0.003	-
HCM Control Delay (s)	0	-	-	0	8.6	7.3	0
HCM Lane LOS	A	-	-	A	A	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-

Intersection

Int Delay, s/veh 2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	3	0	5	0	9	5	5	16	0
Future Vol, veh/h	0	0	0	3	0	5	0	9	5	5	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	0	5	0	10	5	5	17	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	43	43	17	41	41	13	17	0	0	15	0	0
Stage 1	28	28	-	13	13	-	-	-	-	-	-	-
Stage 2	15	15	-	28	28	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	960	849	1062	963	851	1067	1600	-	-	1603	-	-
Stage 1	989	872	-	1007	885	-	-	-	-	-	-	-
Stage 2	1005	883	-	989	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	953	846	1062	961	848	1067	1600	-	-	1603	-	-
Mov Cap-2 Maneuver	953	846	-	961	848	-	-	-	-	-	-	-
Stage 1	989	869	-	1007	885	-	-	-	-	-	-	-
Stage 2	1000	883	-	986	869	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.5	0	1.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1600	-	-	- 1025	1603	-	-
HCM Lane V/C Ratio	-	-	-	- 0.008	0.003	-	-
HCM Control Delay (s)	0	-	-	0 8.5	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	- 0	0	-	-

Appendix I – Year 2020 Build Capacity Analysis

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	6	0	5	0	16	7	5	20	0
Future Vol, veh/h	0	0	0	6	0	5	0	16	7	5	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	7	0	5	0	17	8	5	22	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	57	58	22	54	54	21	22	0	0	25	0	0
Stage 1	33	33	-	21	21	-	-	-	-	-	-	-
Stage 2	24	25	-	33	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	940	833	1055	944	837	1056	1593	-	-	1589	-	-
Stage 1	983	868	-	998	878	-	-	-	-	-	-	-
Stage 2	994	874	-	983	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	933	831	1055	942	834	1056	1593	-	-	1589	-	-
Mov Cap-2 Maneuver	933	831	-	942	834	-	-	-	-	-	-	-
Stage 1	983	865	-	998	878	-	-	-	-	-	-	-
Stage 2	989	874	-	980	865	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		8.7		0		1.5	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1593	-	-	- 991	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.012	0.003	-	-
HCM Control Delay (s)	0	-	-	0 8.7	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-




2: 118th Street & Driveway A

07/09/2018

Intersection

Int Delay, s/veh 4.1

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations   

Traffic Vol, veh/h 11 15 15 5 4 12

Future Vol, veh/h 11 15 15 5 4 12

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 12 16 16 5 4 13

Major/Minor Minor1 Major1 Major2

Conflicting Flow All 41 19 0 0 22 0

Stage 1 19 - - - - -

Stage 2 22 - - - - -

Critical Hdwy 6.42 6.22 - - 4.12 -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 - - 2.218 -

Pot Cap-1 Maneuver 970 1059 - - 1593 -

Stage 1 1004 - - - - -

Stage 2 1001 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 967 1059 - - 1593 -

Mov Cap-2 Maneuver 967 - - - - -

Stage 1 1004 - - - - -

Stage 2 998 - - - - -

Approach WB NB SB

HCM Control Delay, s 8.6 0 1.8

HCM LOS A

Minor Lane/Major Mvmt NBT NBRWBLn1 SBL SBT

Capacity (veh/h) - - 1018 1593 -

HCM Lane V/C Ratio - - 0.028 0.003 -

HCM Control Delay (s) - - 8.6 7.3 0

HCM Lane LOS - - A A A

HCM 95th %tile Q(veh) - - 0.1 0 -

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	3	0	5	0	20	5	5	27	0
Future Vol, veh/h	0	0	0	3	0	5	0	20	5	5	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	0	5	0	22	5	5	29	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	67	67	29	64	64	24	29	0	0	27	0	0
Stage 1	40	40	-	24	24	-	-	-	-	-	-	-
Stage 2	27	27	-	40	40	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	926	824	1046	930	827	1052	1584	-	-	1587	-	-
Stage 1	975	862	-	994	875	-	-	-	-	-	-	-
Stage 2	990	873	-	975	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	919	822	1046	928	825	1052	1584	-	-	1587	-	-
Mov Cap-2 Maneuver	919	822	-	928	825	-	-	-	-	-	-	-
Stage 1	975	859	-	994	875	-	-	-	-	-	-	-
Stage 2	985	873	-	972	859	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1584	-	-	- 1002	1587	-	-
HCM Lane V/C Ratio	-	-	-	0.009	0.003	-	-
HCM Control Delay (s)	0	-	-	0	8.6	7.3	0
HCM Lane LOS	A	-	-	A	A	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-

Intersection

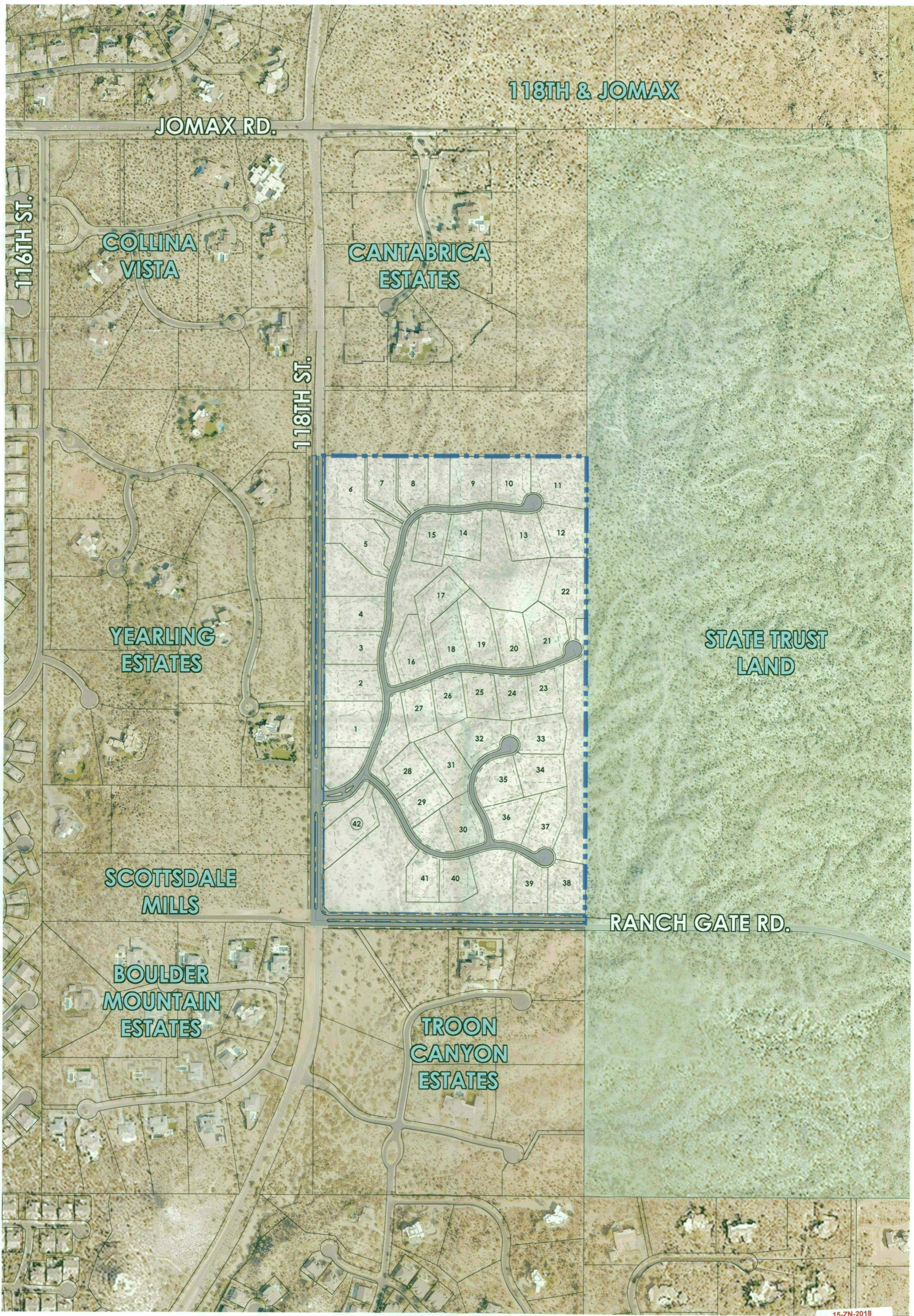
Int Delay, s/veh 3 6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	11	6	12	11	17	19
Future Vol, veh/h	11	6	12	11	17	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	7	13	12	18	21

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	77	19	0 0 25 0
Stage 1	19	-	- - - -
Stage 2	58	-	- - - -
Critical Hdwy	6 42	6 22	- - 4 12 -
Critical Hdwy Stg 1	5 42	-	- - - -
Critical Hdwy Stg 2	5 42	-	- - - -
Follow-up Hdwy	3 518	3 318	- - 2 218 -
Pot Cap-1 Maneuver	926	1059	- - 1589 -
Stage 1	1004	-	- - - -
Stage 2	965	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	916	1059	- - 1589 -
Mov Cap-2 Maneuver	916	-	- - - -
Stage 1	1004	-	- - - -
Stage 2	954	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	8 8	0	3 4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 962	1589	-
HCM Lane V/C Ratio	-	- 0 019	0 012	-
HCM Control Delay (s)	-	- 8 8	7 3	0
HCM Lane LOS	-	- A	A	A
HCM 95th %tile Q(veh)	-	- 0 1	0	-



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118TH STREET & RANCH GATE RD CONTEXT AERIAL WITH SITE PLAN

200 100 0 200 400
GRAPHIC SCALE
1" = 200'

1775 DRAWN BY: PR 9/28/18



SITE DATA

LOCATION: NEC OF 118TH STREET & RANCH GATE ROAD
ESL LANDFORM: UPPER DESERT
PARCEL #s: 217-02-018A, -018B, -019C, -019D, -019E
EXISTING ZONING: R1-130 ESL
PROPOSED ZONING: R1-43 ESL & O/S (TRACT E)
GROSS ACRES: +/- 68.6 ACRES (+/- 2,990,583 S.F.)
NET ACRES: +/- 64.7 ACRES (+/- 2,818,407 S.F.)
TOTAL LOTS: 42
ALLOWED DU/AC (PER GENERAL PLAN): 0.1 DU/AC (Max.)
PROPOSED DU/AC (R1-43): 0.65 DU/AC
ALLOWED HEIGHT: 24' FROM NATURAL GRADE
PROPOSED HEIGHT: 24' FROM NATURAL GRADE
PROPOSED DESERT SCENIC ROADWAY BUFFER: 40' MIN / 50' AVG.
REQUIRED N.A.O.S. PER SLOPE ANALYSIS: 23.0 AC. (35% OF NET)
PROVIDED N.A.O.S.: 26.5 AC (40% OF NET, 15% MORE THAN REQUIRED)

PROPOSED AMENDED DEVELOPMENT STANDARDS:
MINIMUM LOT WIDTH: 113' (25% REDUCTION)
MINIMUM LOT SIZE: 32,250 SF (25% REDUCTION)
MIN. BLD. SETBACKS - FRONT: 30' (25% REDUCTION)
SIDE: 15' (25% REDUCTION)
REAR: INTERIOR - 27' (25% REDUCTION)
PERIMETER BLD. SETBACK: PER ADJACENT REQ. AT TIME OF BLD. PERMIT

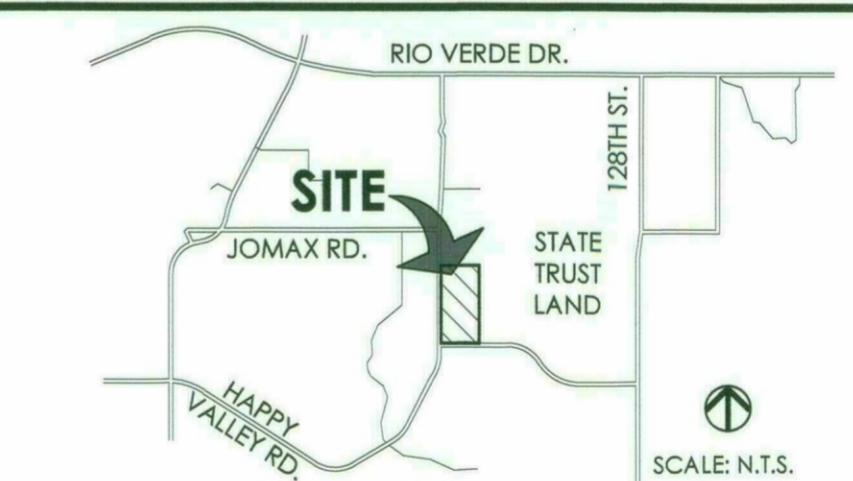
NOTES

- ALL INTERNAL STREETS TO BE DESIGNATED FIRE LANES.
- ALL STREETS TO SUPPORT 83,000 LBS GROSS VEHICLE WEIGHT.
- UNOBSTRUCTED VEHICLE CLEARANCE TO BE 13'-6" MIN.
- HYDRANTS WILL BE PROVIDED AT MAX. SPACING OF 1,200'.
- MIN. CUL-DE-SAC R/W RADIUS OF 50' PROVIDED.
- SITE, LOT AND RETAINING WALLS TO BE CONSISTENT WITH THE DSPM, ORD. SEC. 5.030, 6.1010 &/OR AS APPROVED BY STAFF.
- ALL ON-LOT SITE WALLS TO BE DESIGNED AND LOCATED IN ACCORDANCE TO SCOTTSDALE DSPM AND ORDINANCE REQUIREMENTS AND TO BE REVIEWED WITH THE DRB SUBMITTAL.
- PROJECT ENTRY MEETS C.O.S. DS&PM FIG. 2-1.2 & DS&PM SEC. 2-1.302.
- DEVELOPMENT ENVELOPES SHOWN ARE CONCEPTUAL AND SUBJECT TO CHANGE WITH THE FINAL PLAT

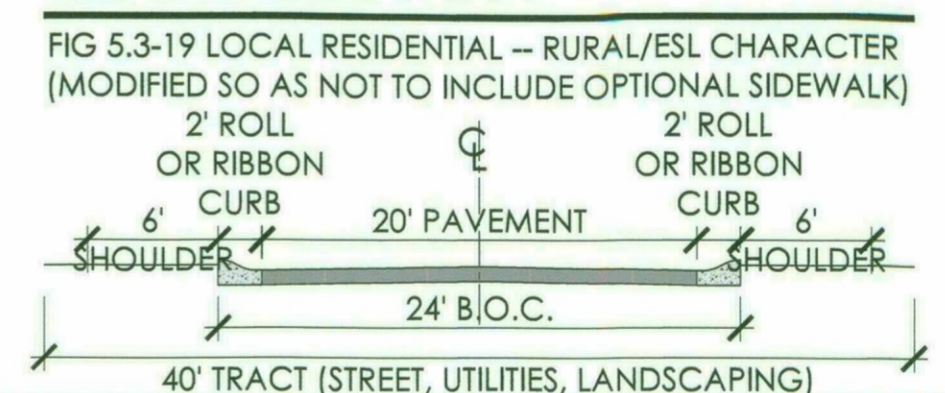
PROJECT TEAM

Discipline	Company Contact Info.
Client	Sonoran Peaks, LLC John Christensen 480.443.2630 jchristensen@andersonco.com
Applicant	Berry Riddell, LLC John Berry 6750 E Camelback Rd. Ste. 100 Scottsdale, AZ 85251 480.994.2753 mh@berryriddell.com
Land Planner	LVA Urban Design Studio/RVI Alex Stedman 120 South Ash Avenue Tempe, Arizona 85281 480.994.0994 astedman@rviplanning.com
Civil Engineer	SEG Ali Fakih 8280 E. Gelding Dr. #101 Scottsdale AZ 85260 480.558.7226 ali@azseg.com

VICINITY MAP

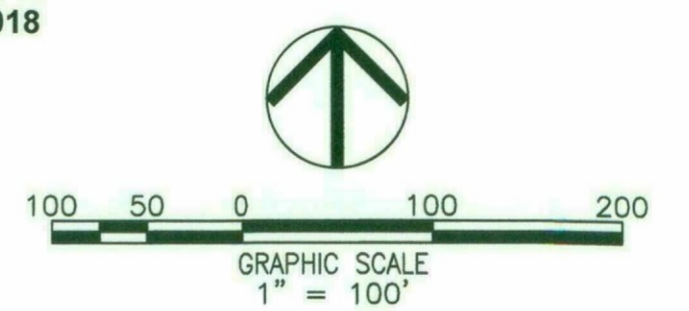


CROSS SECTION



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118TH & RANCH GATE CONCEPTUAL SITE PLAN/ SUBDIVISION PLAN



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*NAOS AREAS & DEVELOPMENT ENVELOPES DEPICATED ABOVE ARE PRELIMINARY AND MAY BE ADJUSTED PRIOR TO FINAL PLAN APPROVAL SO LONG AS THE TOTAL N.A.O.S. DEDICATION REQUIREMENTS ARE MET.

NOTE: ALL CONTIGUOUS NAOS AREAS TO BE A MINIMUM 30' WIDE & 4,000 SQUARE FEET IN AREA PER DSPM SEC. 2-2.501.D.3.

LEGEND

- NET SITE BOUNDARY
- N.A.O.S. UNDISTURBED
- N.A.O.S. REVEGETATED
- DEVELOPMENT ENVELOPE
- PROTECTED BOULDER FEATURE

OPEN SPACE CALCULATIONS

NET SITE AREA: **+/- 65.6 ACRES**

N.A.O.S. REQ. PER SLOPE ANALYSIS: **23.0 ACRES** (35% OF NET AREA)
MIN. REQ. UNDISTURBED AREA: **16.1 ACRES** (70% OF REQ. N.A.O.S.)
MAX. REVEGETATED AREA: **6.9 ACRES** (30% OF REQ. N.A.O.S.)

MIN. N.A.O.S. PROVIDED*

TOTAL: **26.5 AC** (40% OF NET AREA, 15% INCREASE OVER REQUIRED)
TRACTS: **+/- 10.6 AC** (40% OF PROVIDED N.A.O.S. AREA)
ON-LOT: **+/- 15.9 AC** (60% OF PROVIDED N.A.O.S. AREA)

MIN. N.A.O.S. PROVIDED - UNDISTURBED: **18.6 ACRES** (70% OF PROV. N.A.O.S.)
MAX. N.A.O.S. PROVIDED - REVEGETATED: **7.9 ACRES** (30% OF PROV. N.A.O.S.)

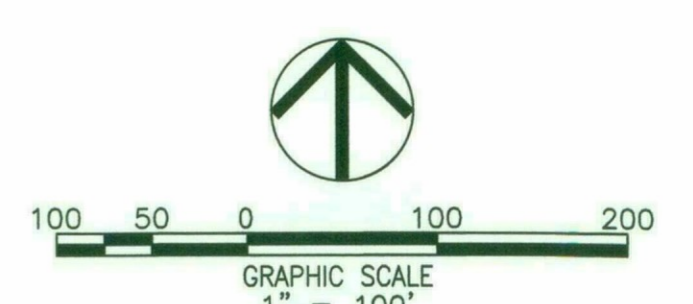
SLOPE ANALYSIS DATA TABLE

SLOPE CATEGORY	AREA (ACRES)	LOWER DESERT FACTOR	REQ. NAOS (ACRES)
0% - 2%	21.80	25%	5.45
2% - 5%	4.22	25%	1.06
5% - 10%	13.39	35%	4.69
10% - 15%	14.69	45%	6.61
15% - 25%	9.70	45%	4.37
25% +	1.78	45%	0.80
TOTAL	65.6 AC.		23.00 AC.



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118TH & RANCH GATE N.A.O.S. STUDY



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118th Avenue & Ranch Gate

Slopes Table					
Color	Minimum Slope	Maximum Slope	Area (AC)	%REQ	AREA NAOS (AC)
<div></div>	0%	2%	21.80	25	5.45
<div></div>	2%	5%	4.22	25	1.06
<div></div>	5%	10%	13.39	35	4.69
<div></div>	10%	15%	14.69	45	6.61
<div></div>	15%	25%	9.70	45	4.37
<div></div>	25%+		1.78	45	0.80
TOTAL			65.58	38.57	22.98

SEG

SUSTAINABILITY
ENGINEERING
GROUP



8280 E GELDING DR #101, SCOTTSDALE, ARIZONA 85280
WWW.AZSEG.COM TEL. 480.588.7226

PROJECT
RESIDENTIAL DEVELOPMENT

LOCATION
SCOTTSDALE, AZ 85244

DRAWN
DESIGNED
CHECKED
PROJ. MGR.

ALI
ALI
COUNSELL
FAKIH

DATE:
ISSUED FOR:

10/04/2018
DRB

REVISION NO.:
DATE:

1

2

3

4

JOB NO.:

SHEET TITLE:

SHEET NO.:

SLOPE ANALYSIS

0' 120' 240' 360'

SCALE: 1" = 120' HORIZONTAL

NORTH

15-ZN-2018
11/14/2018

Call at least two full working days before you begin excavation.

ARIZONA811

800-4-A-1 or 1-800-STAKE-IT (783-8348)
In Maricopa County (602) 285-1100

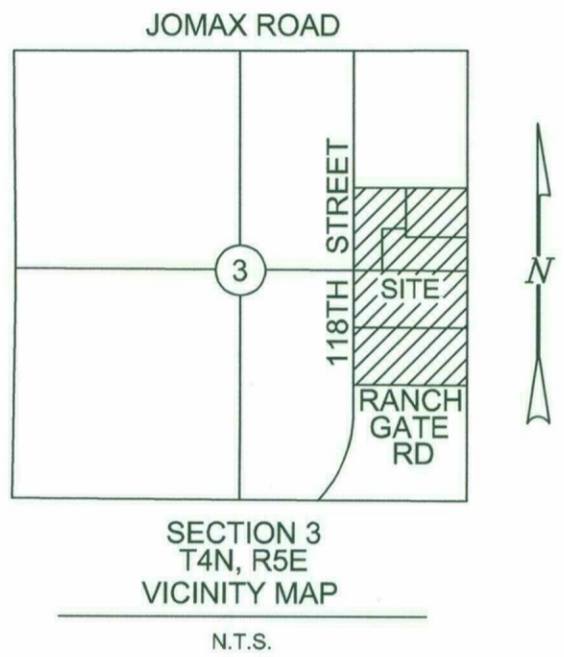
NOTE TO CONTRACTORS

THE SET OF DRAWINGS AND DOCUMENTS IS INTENDED AS A SET OF GUIDELINES FOR THE PROJECT AND ARE INTENDED TO BE USED IN CONJUNCTION WITH A SET OF CONSTRUCTION SPECIFICATIONS TO BE SUPPLIED BY OWNER. THEY MUST BE READ IN CONJUNCTION WITH ANY APPLICABLE FEDERAL, STATE AND LOCAL CODES INCLUDING FEDERAL A.I.A. REQUIREMENTS. THIS SET ASSURES THAT THERE ARE NO UNUSUAL SOIL CONDITIONS OR UNUSUAL LOADS THAT COULD AFFECT THE PROJECT. ANY UNUSUAL SOIL CONDITIONS OR UNUSUAL LOADS THAT COULD AFFECT THE PROJECT MAY REQUIRE SIGNIFICANT CHANGES TO THESE DOCUMENTS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CONFORM TO ALL APPLICABLE CODES AND TO INFORM THE OWNER OF ANY CHANGES TO THESE DOCUMENTS. ON CLARIFICATIONS WHICH ARE DESIGNED CONTRACTORS SHALL ALSO VISIT THE SITE BEFORE BEGINNING CONSTRUCTION AND BE REQUIRED TO KNOW ALL APPLICABLE CONDITIONS AND APPLICABLE CODES.

ALTA/NSPS LAND TITLE SURVEY

PARCEL 4 and A PORTION OF PARCEL 5 THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO BOOK 194, PAGE 26, MCR

BEING
A PORTION OF THE EAST HALF OF SECTION 3,
TOWNSHIP 4 NORTH, RANGE 5 EAST,
OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
MARICOPA COUNTY, ARIZONA.



PARCEL DESCRIPTION

PARCEL NO. 1:

THE NORTH HALF OF PARCEL NO. 4, OF THE GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO, PER MAP RECORDED IN BOOK 194 OF MAPS, PAGE 26, IN THE OFFICE OF THE MARICOPA COUNTY RECORDER;

EXCEPT ALL MINERALS AND URANIUM, THORIUM OR OTHER MATERIALS IN SAID LAND AS RESERVED TO THE UNITED STATES OF AMERICA, IN PATENT RECORDED IN DOCKET 304, PAGE 447, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 2:

THAT PORTION OF PARCEL 5 OF GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO AS RECORDED IN BOOK 194 OF MAPS, PAGE 26, AS RECORDED IN THE OFFICE OF THE MARICOPA COUNTY RECORDER, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID PARCEL 5;
THENCE NORTH 89 DEGREES 37 MINUTES 03 SECONDS WEST ALONG THE SOUTH LINE OF SAID PARCEL 5 A DISTANCE OF 989.19 FEET;
THENCE NORTH 00 DEGREES 06 MINUTES 03 SECONDS EAST A DISTANCE OF 482.68 FEET;
THENCE NORTH 89 DEGREES 43 MINUTES 03 SECONDS EAST A DISTANCE OF 276.94 FEET;
THENCE SOUTH 00 DEGREES 06 MINUTES 03 SECONDS WEST A DISTANCE OF 100.73 FEET;
THENCE SOUTH 89 DEGREES 45 MINUTES 51 SECONDS EAST A DISTANCE OF 712.25 FEET TO A POINT ON THE EAST LINE OF SAID PARCEL 5;
THENCE SOUTH 00 DEGREES 06 MINUTES 03 SECONDS WEST ALONG THE EAST LINE A DISTANCE OF 386.98 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT ALL MINERALS AND URANIUM, THORIUM OR OTHER MATERIALS IN SAID LAND AS RESERVED TO THE UNITED STATES OF AMERICA, IN PATENT RECORDED IN DOCKET 304, PAGE 447, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 3:

THAT PORTION OF PARCEL 5 OF GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO AS RECORDED IN BOOK 194 OF MAPS, PAGE 26, AS RECORDED IN THE OFFICE OF THE MARICOPA COUNTY RECORDER, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID PARCEL 5;
THENCE NORTH 00 DEGREES 06 MINUTES 03 SECONDS EAST ALONG THE EAST LINE OF SAID PARCEL 5 A DISTANCE OF 386.98 FEET TO THE POINT OF BEGINNING;
THENCE NORTH 89 DEGREES 45 MINUTES 51 SECONDS WEST A DISTANCE OF 712.25 FEET;
THENCE NORTH 00 DEGREES 06 MINUTES 03 SECONDS EAST A DISTANCE OF 567.22 FEET;
THENCE SOUTH 89 DEGREES 45 MINUTES 51 SECONDS EAST A DISTANCE OF 712.25 FEET TO A POINT ON THE EAST LINE;
THENCE SOUTH 00 DEGREES 06 MINUTES 03 SECONDS WEST ALONG SAID EAST LINE A DISTANCE OF 567.22 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT ALL MINERALS AND URANIUM, THORIUM OR OTHER MATERIALS IN SAID LAND AS RESERVED TO THE UNITED STATES OF AMERICA, IN PATENT RECORDED IN DOCKET 304, PAGE 447, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 4:

THE SOUTH HALF OF PARCEL 4, THE GOLDIE BROWN PINNACLE PEAK UNIT TWO, ACCORDING TO BOOK 194 OF MAPS, PAGE 26, RECORDS OF MARICOPA COUNTY, ARIZONA;

EXCEPT ALL MINERALS AND URANIUM, THORIUM OR OTHER MATERIALS IN SAID LAND AS RESERVED TO THE UNITED STATES OF AMERICA, IN PATENT RECORDED IN DOCKET 304, PAGE 447, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 5:

THAT PORTION OF PARCEL 5 OF GOLDIE BROWN PINNACLE PEAK RANCH UNIT TWO AS RECORDED IN BOOK 194 OF MAPS, PAGE 26, AS RECORDED IN THE OFFICE OF THE MARICOPA COUNTY RECORDER, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID PARCEL 5;
THENCE NORTH 00 DEGREES 05 MINUTES 11 SECONDS EAST ALONG THE WEST LINE OF SAID PARCEL 5 A DISTANCE OF 950.84 FEET;
THENCE SOUTH 89 DEGREES 45 MINUTES 51 SECONDS EAST A DISTANCE OF 604.09 FEET;
THENCE SOUTH 00 DEGREES 06 MINUTES 03 SECONDS WEST A DISTANCE OF 466.49 FEET;
THENCE SOUTH 89 DEGREES 43 MINUTES 03 SECONDS WEST A DISTANCE OF 276.94 FEET;
THENCE SOUTH 00 DEGREES 06 MINUTES 03 SECONDS WEST A DISTANCE OF 482.68 FEET;
THENCE NORTH 89 DEGREES 37 MINUTES 03 SECONDS WEST A DISTANCE OF 326.91 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT ALL MINERALS AND URANIUM, THORIUM OR OTHER MATERIALS IN SAID LAND AS RESERVED TO THE UNITED STATES OF AMERICA, IN PATENT RECORDED IN DOCKET 304, PAGE 447, RECORDS OF MARICOPA COUNTY, ARIZONA.

SCHEDULE "B" ITEMS

- Reservations or Exceptions in Patents, or in Acts authorizing the issuance thereof.
- The right to enter upon said land and prospect for and remove all coal, oil, gas, minerals or other substances, as reserved in the Patent to said land recorded in Docket 304, Page 447.
(Affects all Parcels)
- Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of The Goldie Brown Pinnacle Peak Ranch Unit Two, as recorded in Plat Book 194 of Maps, Page(s) 26, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c).
Thereafter Partial Release of Platted Utility Easement recorded June 14, 2018 as 2018-0454204 of Official Records; and
Thereafter Map of Easement Release recorded in Book 1415 of Maps, Page 48.
(Affects all Parcels)
- This item has been intentionally deleted.
- Covenants, Conditions and Restrictions as set forth in document recorded in Docket 12580, Page 1614, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c).
(Affects all Parcels)
- An easement for public ingress and egress and incidental purposes in the document recorded as 2004-0293124 of Official Records.
(Affects Parcel No. 4)
- The terms and provisions contained in the document entitled "Memorandum of Agreement" recorded April 07, 2006 as 2006-0471424 of Official Records.
(Affects Parcel Nos. 1, 4 and 5)
- All matters as set forth in Right of Way Dedication, recorded November 28, 2006 as 2006-1552543 of Official Records.
(Affects Parcel Nos. 1, 4 and 5)
- All matters as set forth in City of Scottsdale Drainage and Flood Control Easement and Provision for Maintenance, recorded June 12, 2007 as 2007-0677420 of Official Records.
(Affects Parcel Nos. 1 and 4)
- This item has been intentionally deleted.
- All matters as set forth in City of Scottsdale Drainage and Flood Control Easement and Provision for Maintenance, recorded June 12, 2007 as 2007-0677422 of Official Records.
(Affects Parcel No. 5)
- This item has been intentionally deleted.
- This item has been intentionally deleted.
- This item has been intentionally deleted.
- This item has been intentionally deleted.
- Water rights, claims or title to water, whether or not shown by the public records.

GENERAL NOTES:

- ALL TITLE INFORMATION IS BASED ON A COMMITMENT FOR TITLE INSURANCE PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ORDER NO. NCS-874467-PHX1, WITH AN EFFECTIVE DATE OF OCTOBER 9, 2018.
- A.R.S. 32-151 STATES THAT THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" BY A PERSON OR FIRM THAT IS REGISTERED OR CERTIFIED BY THE BOARD IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OR FINDINGS THAT ARE SUBJECT TO THE CERTIFICATION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE.
- SURVEY FIELD WORK WAS COMPLETED ON NOVEMBER 1, 2017.
- THIS SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP, TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- TOPOGRAPHY SHOWN HEREON IS PER AN AERIAL SURVEY PREPARED BY AEROTECH MAPPING, INC., JOB #1017-103, FLIGHT DATE NOVEMBER 8, 2017.
- THIS SITE CONTAINS WASHES, TRAILS AND VEGETATION CONSISTENT WITH DESERT TERRAIN.

BASIS OF BEARING

THE BASIS OF BEARING AND ALL MONUMENTATION SHOWN HEREON IS BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 4 NORTH, RANGE 5 EAST, USING A BEARING OF NORTH 00°01'27" WEST AS SHOWN ON THE PLSS RECORD OF SURVEY, BOOK 700, PAGE 12, MARICOPA COUNTY RECORDS.

BENCHMARK

BENCHMARK IS A GENERAL LAND OFFICE BRASS CAP BEING THE EAST QUARTER CORNER OF SECTION 3, T4N, R5E.

ELEVATION = 2715.71' NAVD 88 (CITY OF SCOTTSDALE DATUM)

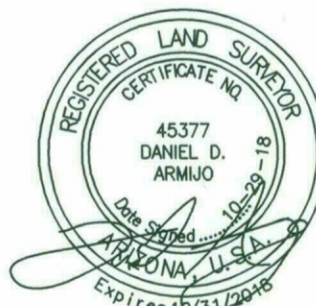
NOTES: (Table "A" Items")

- SET A 1/2" REBAR W/CAP "AWLS 45377" AT PROPERTY CORNERS AS SHOWN HEREON UNLESS OTHERWISE NOTED.
- PARCEL NO. 1:
AREA IS 868,558.5 SQUARE FEET OR 19.939 ACRES, MORE OR LESS.
PARCEL NO. 2:
AREA IS 409,251.3 SQUARE FEET OR 9.395 ACRES, MORE OR LESS.
PARCEL NO. 3:
AREA IS 403,821.4 SQUARE FEET OR 9.270 ACRES, MORE OR LESS.
PARCEL NO. 4:
AREA IS 868,291.1 SQUARE FEET OR 19.933 ACRES, MORE OR LESS.
PARCEL NO. 5:
AREA IS 440,661.1 SQUARE FEET OR 10.116 ACRES, MORE OR LESS.
- ADJOINER INFORMATION IS PER MARICOPA COUNTY ASSESSOR WEBSITE.

CERTIFICATION:

To: SONORAN PEAKS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY
FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 8, 11, 16, 17 AND 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON NOVEMBER 1, 2017.



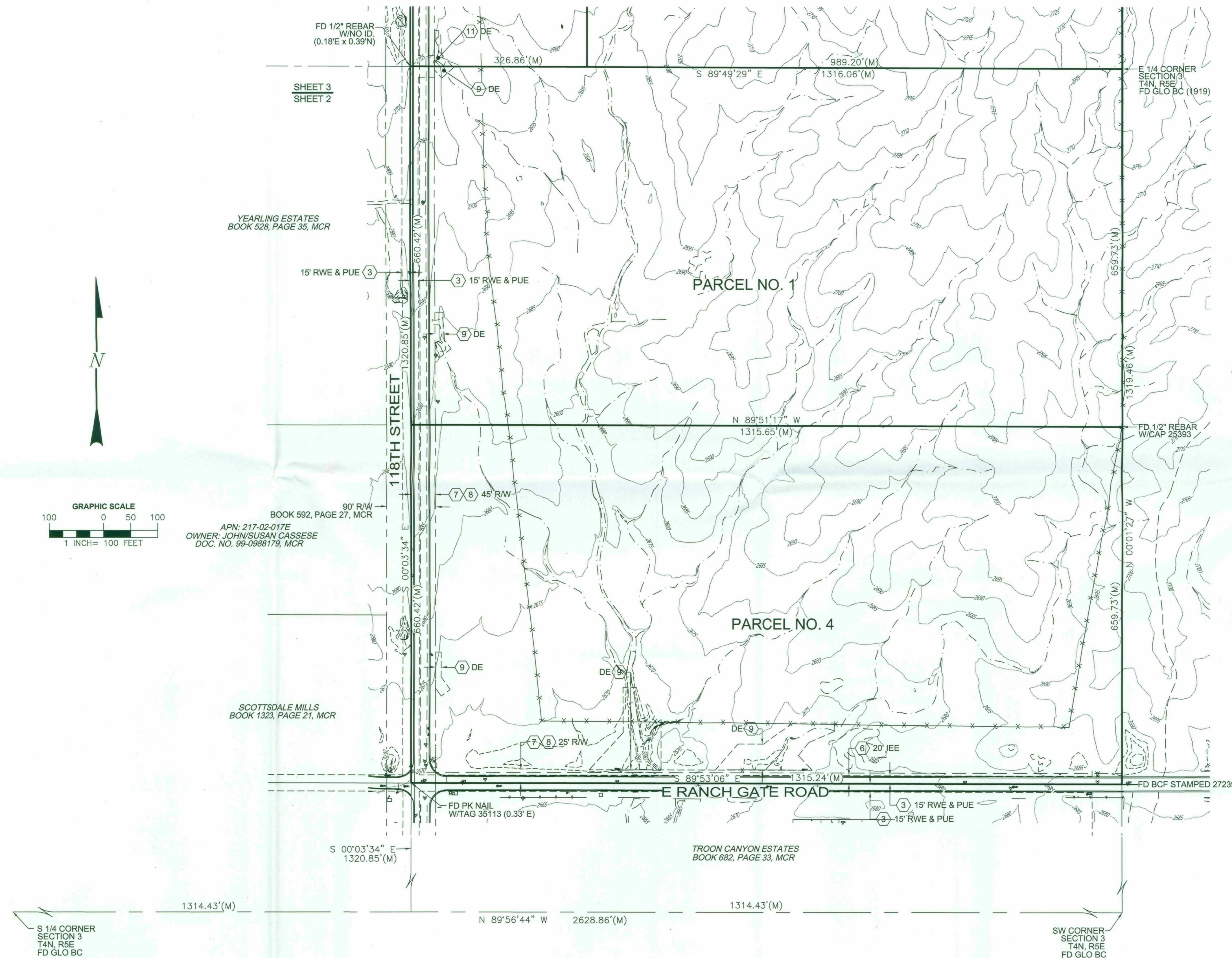
15-ZN-2018
11/14/2018

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ALTA/NSPS LAND TITLE SURVEY
SECTION 3
TOWNSHIP 4 NORTH
RANGE 5 EAST
OF THE G.S.R.B. & M.
MARICOPA COUNTY, ARIZONA

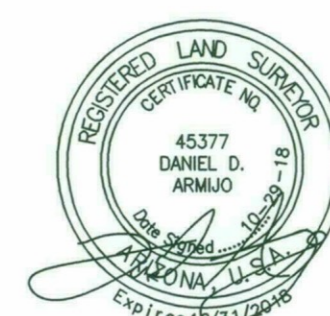
AW
LAND
SURVEYING, LLC
P.O. BOX 2170, CHANDLER, AZ 85244
(480) 244-7630 (480) 243-4287

DRAWN BY: DDA CHECKED BY: DDA DATE: 10/29/18 JOB NO.: 17-102 SHEET NO. 1 OF 3



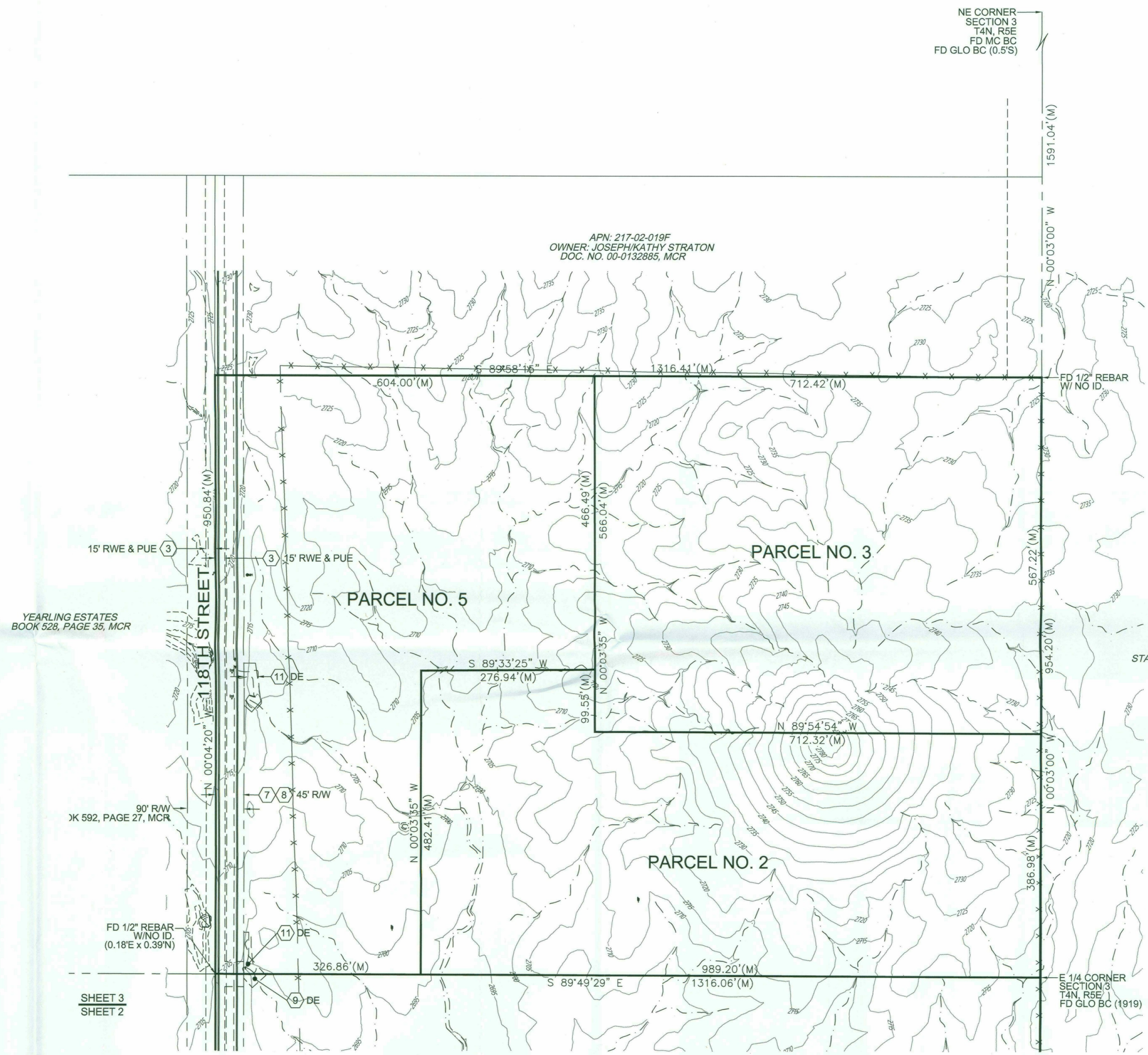
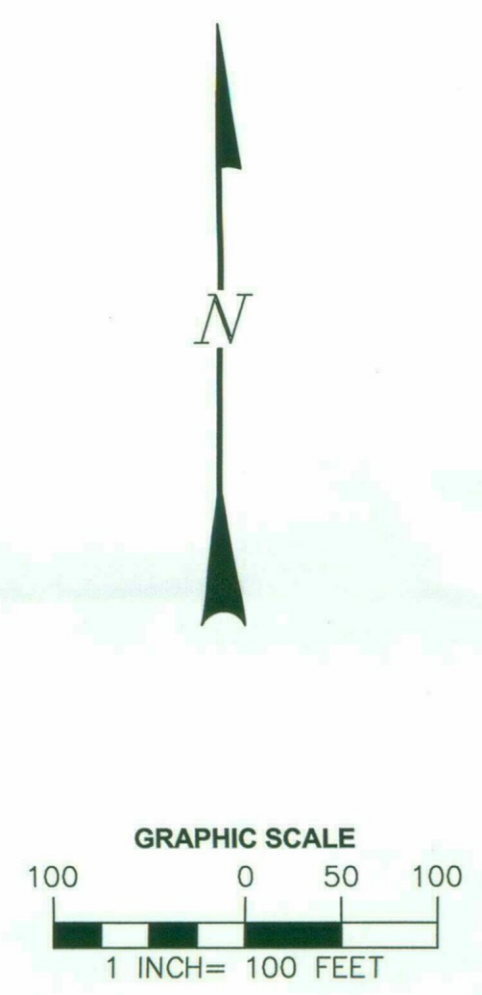
LEGEND

MCR	MARICOPA COUNTY RECORDS
APN	ASSESSOR PARCEL NUMBER
DOC.	DOCUMENT
NO.	NUMBER
FD.	FOUND
MC BC	MARICOPA COUNTY BRASS CAP
GLO BC	GENERAL LAND OFFICE BRASS CAP
ID.	IDENTIFICATION
RWE	ROADWAY EASEMENT
PUE	PUBLIC UTILITY EASEMENT
DE	DRAINAGE EASEMENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
R/W	RIGHT-OF-WAY
IEE	INGRESS/EGRESS EASEMENT
(M)	MEASURED DATA
—	PROPERTY LINE
—	ADJOINER LINE
---	SECTION LINE
---	EASEMENT LINE AS NOTED
⊕	FIRE HYDRANT
□	METER / UTILITY
⊙	MANHOLE
⊕	VALVE
⊕	POST / BOLLARD
+	FENCE



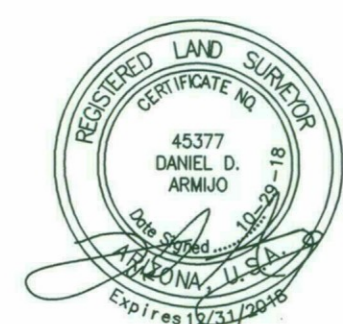
ALTA/NSPS LAND TITLE SURVEY
SECTION 3
TOWNSHIP 4 NORTH
RANGE 5 EAST
OF THE G.S.R.B. & M.
MARICOPA COUNTY, ARIZONA

AW
LAND SURVEYING, LLC
P.O. BOX 2170, CHANDLER, AZ 85244
(480) 244-7630 (480) 243-4287



LEGEND

- | | |
|--------|---------------------------------|
| MCR | MARICOPA COUNTY RECORDS |
| APN | ASSESSOR PARCEL NUMBER |
| DOC. | DOCUMENT |
| NO. | NUMBER |
| FD. | FOUND |
| MC BC | MARICOPA COUNTY BRASS CAP |
| GLO BC | GENERAL LAND OFFICE BRASS CAP |
| ID. | IDENTIFICATION |
| RWE | ROADWAY EASEMENT |
| PUE | PUBLIC UTILITY EASEMENT |
| DE | DRAINAGE EASEMENT |
| TCE | TEMPORARY CONSTRUCTION EASEMENT |
| R/W | RIGHT-OF-WAY |
| IEE | INGRESS/EGRESS EASEMENT |
| (M) | MEASURED DATA |
| ———— | PROPERTY LINE |
| ———— | ADJOINER LINE |
| ———— | SECTION LINE |
| ----- | EASEMENT LINE AS NOTED |
| ⊕ | FIRE HYDRANT |
| □ | METER / UTILITY |
| ⊙ | MANHOLE |
| ⊗ | VALVE |
| ⊙ | POST / BOLLARD |
| --- | FENCE |



ALTA/NSPS LAND TITLE SURVEY
SECTION 3
TOWNSHIP 4 NORTH
RANGE 5 EAST
OF THE G.S.R.B. & M.
MARICOPA COUNTY, ARIZONA

AW LAND SURVEYING, LLC
P.O. BOX 2170, CHANDLER, AZ 85244
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